

UFHC 54

Interviewee: Dr. Melvin Greer

Interviewer: Nina Stoyan-Rosenzweig

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R: This is Nina Stoyan-Rosenzweig. I am interviewing Melvin Greer, M.D. The date is March 25, 2002. When and where you were born?

G: New York, October 14, 1929.

R: That's New York City?

G: Yes.

R: Any particular part of New York?

G: Manhattan.

R: Is there anything about your childhood or your family that you would want to mention: siblings, your parents, what did they do?

G: It was a loving family. Positive goals, high ideals, and dreams of the children were nourished.

R: So it was child-centered. They encouraged you then to pursue education, obviously.

G: Yes, that was a primary direction for people who came from our background. The family was second-generation immigrants from Russia, Jewish heritage, and educational goals were a primary focus.

R: What can you tell me about your early education? I guess we can start at high school unless there's anything about your elementary years that you would say was important.

G: Nothing different than anyone else who was a potential high achiever. Getting good grades, being on top of the class, and so forth. Then from there, going into college and doing the same thing.

R: In high school, did you have any sense of what sort of career you would want to pursue?

G: Yes.

R: So you knew, early on, that you wanted to become a physician?

G: Yes.

R: Where did you attend college?

G: New York University College of Arts and Pure Science.

R: You ended up with a bachelor of arts. Did you focus on biology? Did you have any particular interests?

G: No, I actually focused in English and entered the English honors program. Did this with a deliberate approach, recognizing that my entire career would be more involved with science and medicine and this would be the only opportunity I would have to learn about the humanities. It was something which was deliberate on my part, even though I did excel and have very high grades and could have been admitted to medical school after three years, on the basis of achievements, I elected to remain and pursue my English honor's career. That's been fostered in my own children who have pursued a medical career, at least some of them. Once again, one has a master's in English literature and the other one graduated with honors in English literature [as a] specialty.

R: Was that English composition or literature?

G: Literature.

R: Any particular field for you?

G: Shakespeare and post-Shakespeare.

R: English literature, then. Was there anyone either in the English department or in biology or any of the courses you took who was especially inspirational?

G: No, I did not have any single mentor. As I progressed in my career, I had the opportunity to communicate with some of those individuals who were in charge of the program, to discuss issues dealing with the course work, but nothing beyond that. I, at that time, growing up, was young, energetic, full of male hormones and was attracted to a woman who was also very highly intelligent and currently is the drama critic for *The Gainesville Sun* [Arline Greer]. This was something that I was looking for in terms of a mate. Not consciously, of course, but I guess that was part of it.

R: World War II was going on when you were in high school?

G: Yes.

R: Was there anything about the atmosphere of the times that you found memorable or influential?

G: Yes. It was, obviously, being a Jew and recognizing the horrendous, horrific experience that was encountered by Jewish people in Europe. That tragedy was memorable and continues to be a focus in my mind, the needs of the Jewish people to retain their ethnicity. Not being destroyed by infidels.

R: At what point did it become clear that that was an issue for you?

G: Growing up, I guess, throughout my junior high school and high school years. It continues to be reinforced whether it's by going and watching *The Diary of Anne Frank* again, which is currently at the Hippodrome [theater], or reading, as I have, a new book on Churchill. Elementary point of recognizing the value of humanity.

R: Let me go back to your college education. You graduated in 1950, with honors. Did you begin medical school immediately?

G: Yes.

R: Where did you go to medical school?

G: New York University.

R: Did you apply elsewhere?

G: I probably applied elsewhere, but the financial aspects precluded my ability to go elsewhere easily. We remained in New York City and stayed at home until I got married during my medical school career and my wife and I shared the school responsibilities. I put her to work.

R: How did you finance your medical school career? Were you working also?

G: The type of work I did was sufficient to bring in enough food for lunch and dinner. The type of work was what many medical students did, which was to sell blood every two months and to sell sweat and skin. I served as a chauffeur for people who had to travel from the institution, during my time off. I worked after hours in the record room of the hospital. Anything to bring in money, to help survive, basically.

R: What sort of work was your wife doing at the time?

- G: At that time she was editor of a magazine which is still being published. It's called *Where*. You go into any of the hotels in a major city and you will get a free glossy magazine telling you where to go to eat and where to go to the theater and so forth. We dined while I was in medical school and then the first two years of post-medical school training as an intern and a resident, because she had to go to write about where to go to eat. We used to go to the Sherry Netherlands [Hotel] and the Waldorf-Astoria, where she would write about what was to be done at these places for the visitor in New York. I would gorge myself on the food. On alternate nights, I used to invite her down to Bellevue Hospital, where I was an intern and we would have macaroni and cheese, except Friday, we'd have fish then.
- R: That's certainly a contrast. Is there anything about your medical school experience that stands out?
- G: In essence, it was a time of very hard work. It was something that was accepted. I made fifty dollars a month.
- R: That was as a resident?
- G: As an intern. As a resident, I got ninety dollars a month. I had a very small room there, in addition to the apartment that my wife and I had after I got married. It was hard work. Every other night and every other weekend, I was on-call. Of course, the days after being on-call, I was there during the day to care for my patients. That night I caught up and hopefully slept a little. It was a very stressful period of time, except it was only after it was all over that I recognized how stressful it was because I was going at a very high level of energy throughout that period.
- R: You were too caught up in it to be aware of what you're experiencing. You started medical school in 1950. The 1950s were really a period when medicine was sort of at its peak, in terms of its own confidence in itself and public confidence. What was medical school like? What was the curriculum like?
- G: I don't know if I agree with your comment, but that's all right. Medicine, like every other area of science, it continues to evolve. At that time, the big push, as far as I could see from my perspective, was to be sure that there were sufficient physicians being trained who would be able to help society. There was a dearth of doctors and a clamor for help. We certainly didn't have a cure for cancer at that time. Now, we still don't have a cure for cancer. Nor did we have a cure for Alzheimer's Disease at that time and we still don't have a cure for Alzheimer's Disease. The issue continues to be an evolving one where the major direction was to be involved with an educational program to help produce honest, well-trained physicians. [That is what] I recognized as being the major push.

Along with this, it was a matter of learning as much as one could toward the end, and trying to answer questions. What's the cause and cure of cancer and so forth. I didn't see this as being a golden age. I think this was a period of evolution and it still continues to the present.

R: How would you define that period?

G: Just an opportunity for us to be taught and become as capable as possible. Retain the basic motivation, which is that of helping others. Watch out for things that perhaps detract from that. You can't work hard if you don't feel that you can put in the effort and energy of becoming an honest, devoted, hard-working physician, then perhaps you should be in a different field.

R: It was a basic curriculum, with the first two years being, basically, classroom oriented. The third year, you started doing clinical work. Were you doing any research at the time? Was research emphasized at all?

G: Research was always available, in terms of an opportunity. For those of us who felt that perhaps our careers were not to go out into private practice and just make a living, but to continue an academic pursuit, it was apparent that trying to understand that research was the way of doing that would be important. Since an academic pursuit implied that you did more than just see patients and run an office. You had to get involved with some type of research pursuits and the opportunities were there in college, particularly in medical school, where there are other doctors around who were doing research with whom you could collaborate. So I did some research in medical school.

R: What sort of research did you do?

G: The type of research that I did in medical school was a basic study of protein-iodine linkage. I did this under the direction of one of our biochemistry professors.

R: How did you choose biochemistry?

G: It was just an area of interest. I had a good grade in that. I was impressed by the professor, in terms of his diligence and so forth.

R: Research was not required? It wasn't like Florida where you did a research thesis or anything like that?

G: I don't know if it's required for the medical student now at the University of Florida.

R: It's not, but it was in the early years. It was something you pursued, then, because of your own interests. It sounds as if you knew from an early period that you were interested in academic medicine, that you were already focused on working in a medical school.

G: Yes.

R: When did you decide on neurology as a speciality?

G: My early career in medical school was really not in neurology. I was interested in pediatrics. This was because of the joy of being with children, fundamentally. Still, that type of pleasure in me persists. So I pursued a career in post-M.D. internship and residency at Bellevue Hospital in pediatrics. However, in my second year, I became disenchanted with the lack of intellectual stimulation that pediatrics provided. I wanted to sub-specialize. Toward the end of my second year as a pediatric resident, I applied for a position in neurology, where the direction was to go into pediatric neurology. That subsequently has changed.

R: Why neurology?

G: It was an area that did attract me from the standpoint of being highly intellectually stimulating. It was a field that required a great deal of understanding from the perspective of what makes "all things go." It's not just that you have an infection and you give an antibiotic. It's a matter of why the patient does not think clearly, etc. That was an area of greater fascination for me.

R: What was the state of knowledge about brain function or nervous system function at that time?

G: That really is a long standing knowledge base that had existed. [Sigmund] Freud [medical doctor, founder of psychoanalysis] was a neurologist, as you may know, in the 1800s. It's a matter of recognizing that unique things have been described, however, the pace of medicine was going in a direction that made those in the field more interested in a cure, a drug, a surgical procedure rather than why the patient has difficulty thinking or talking. Some of the earlier papers that had appeared in the literature in the 1800s and early 1900s really put the spotlight on various areas of the brain and how they work. Why is it that some patient have what is called aphasia, where they understand, but [are] not able to speak or vice versa. These are very important areas that needed elucidation, so we could perhaps learn why we are a higher-level animal than a monkey or even lower forms. That stimulated me, that interested me. At the same time, because of some of the interests I had in biochemistry, I started my early career in my activities here in the laboratory, pursuing biochemical direction and understanding such conditions as Parkinson's Disease and causes of mental

- retardation, again linking the biochemical component to the clinical component. That's the way I began my career from the standpoint of an academic pursuit.
- R: Could you describe a typical day as a first-year intern? At Bellevue Hospital as a pediatric intern, what were you doing? What were they demanding of you?
- G: Very, very sick little children and mainly I was establishing a diagnosis and rendering treatment. Infection is a primary issue when you deal with very, very sick infants. It was a matter of being involved and starting intravenous infusions and offering antibiotic therapy and controlling seizures as they would occur. There are many anecdotes obviously that come to mind. At Bellevue Hospital there was an open ward, sixteen cribs. Eight on one side, eight on another side, everybody hustling about looking after one child after the other. As I remember back at this time, one of my interns when I was a second-year house officer as a resident, is still a very close friend of mine [and] is a professor of pediatrics in San Francisco. [She] remembers me, vividly, making rounds one morning. I would start at bed 1 and work my way around to find out how the patients were doing. [While] I was on bed 1, I was talking about that patient. I looked up ahead and some child in bed 6 was turning blue. Without missing a step, in terms of what I was talking about with regard to patient in bed 1, I went up to bed 6, picked up the child by his feet, wacked him on his back to clear the mucus plug. He cleared up, he began crying. I put him back in bed. I came back to bed 1 and didn't miss a step in terms of what I was talking about – the kid in bed 1. This is what you do. This is your life. You continue in that direction and day by day, you do it. You deal with the problems as they emerge and you step right in there. That colleague of mine remembers also the fact that when I was on the infant's floor, little people under the age of six months, we had a nursing shortage. I would take one infant and put his two feet in one of my pockets of my long white coat. Another infant, his two feet in the other pocket, and I would feed them both as I would walk down the hall, talking about the patient probably, because we had a nurse shortage and children had to be fed.
- R: This was obviously bottle-feeding.
- G: Yes, the expedient way of doing things.
- R: Were these mostly poor children?
- G: Yes. Bellevue Hospital was the indigent center. Like Charity Hospital in New Orleans or Cook County Hospital in Chicago.
- R: Did many of these children not have parents?
- G: No, they had parents. Single parents often, or parents who were deprived. Many of them were immigrants without visas, so to speak. These were Puerto

Ricans. I learned how to speak Spanish in a very garbled way. When I was on obstetrics, which was my first rotation as a medical student, I learned my first words of Spanish. Empuje, mama.

R: Which means?

G: Push.

R: That was at NYU?

G: Yes.

R: What are some other anecdotes of your internship?

G: It was an issue of being a growing man and not having enough to eat. I remember that the way the kids were fed was a big, heated metal container that came with cereal. [They'd] dollop out the cereal, one bowl for each kid. They would take that metal container out. What are you going to do with it? Throw it out. I said, don't throw it out. This is before we saw the patients. My co-residents and I, the three or four of us, we'd sit down, we'd take bowls and we'd have breakfast, what the kids didn't eat of the cereal.

Things needed to be done and you can't just take off. You're on-call every other night, every other weekend. Sometimes even those nights that we were supposedly not on-call, we would come to look after them. These are children who would come in through the emergency room. We'd have to deal with it. Anecdotes are rife. Anybody who worked at that time will remember things. Whether these are important things are not, I really can't say. I was on-call in the emergency room and a grandmother brought in a child who had a runny nose and a cough. I looked at the child, I said the child seems to have a viral infection. The grandmother says, no that's measles. I said, she doesn't have measles, she doesn't have a rash. No, that's measles, said the grandmother. I said, well, I can't do anything for the measles anyway other than treat the cold symptoms. I sent [them] out. Lo and behold, the grandmother came back the next day, with the kid, with a rash. [She said,] see, I told you. This is the way you learn. This is measles. Learn from everybody. Never doubt a grandmother. That was the lesson.

R: What were some of the common ailments of the time, you mentioned infections?

G: Beyond infections, we had very, very serious illnesses. Because we were a major regional hospital, we had a tuberculosis ward, we had a polio ward during the polio season. Specific infections were areas that we had to deal with. I remember being among the residents who had to cover for other residents who

were afraid of being involved with the polio children or tuberculosis children. This was a recognizable fear. Whether I was foolhardy or not, I did out my time and double time also, to look after such children who needed help. Yes, we had a ward full of children with leukemia. We had children who presented with acute problems of a traumatic nature, which is where you always have to be concerned with a kid that falls off a bicycle. This was a general, major center for pediatric care.

R: You were an intern and resident right around the time when the polio vaccine was being created. Was that introduced into the hospital?

G: No.

R: Were you vaccinated?

G: Subsequently, yes. With my children, however, before I was vaccinated, I had antibody studies done as an option and I found out that I was exposed and had all three polio viruses in my system, so I didn't really need it. But I took the vaccine.

R: What was your experience with the vaccine and how did it change the way people viewed polio?

G: It was certainly a major advance in the scheme of health care. It was second only to the smallpox vaccine, I would suspect, in terms of providing health care needs. I do remember President [Franklin Delano] Roosevelt [U.S. President, 1933-1945], who himself had polio, urging March of Dimes, telling kids in classes to give their dimes to help provide the wherewithal to produce the polio vaccine. Those were early days of major public health assistance.

R: Did a lot of medical students and interns also end up getting tuberculosis?

G: Yes. It was an index of worry when you were dealing with a patient. This is the major direction or the major way in which one gets tuberculosis. No longer was there any tuberculosis material in milk because it was pasturized. It came by air-borne droplets. That was one of the concerns and many residents who were caring for such patients did develop tuberculosis. I didn't take any special precautions that I remember. None of us were wearing masks. Although perhaps in retrospect, it should have been mandatory. It was very distracting to a patient for a physician to come on board with a mask.

R: Especially for a pediatric patient.

- G: They're not the ones that created the problem. It was from dealing with the adult. This is the major way. The grandma who has an open cavity in the lung, takes care of the baby and coughs. Whammo, the baby gets it. You pick up the baby, the baby doesn't cough. It takes you until you're seven years of age before you can expectorate. You get a baby that small, they swallow the stuff, they don't throw it out into the world.
- R: That's interesting. You finished your residency in 1956. You had a period where you were in the Navy. What led you to enlist?
- G: This was involuntary. I was in medical school during the Korean War. I was deferred so I could complete my medical school education. It was at this time, they had what is called the doctor draft. You were obligated to spend two years in the military upon conclusion of your residency. That was all schemed up. I had two years of vacation. It really was a wonderful two years we spent, my wife and I, on Guam, in the Navy. I was a pediatrician at that time, but I had my plans of going back into neurology. [I] spent those two years raising my first child, living in island splendor. Learning how to spend money, which was more than ninety dollars a month, on groceries. It was great.
- R: Was your child actually born on Guam?
- G: Yes, he considers himself a Guamanian.
- R: Did you choose the Navy or did they choose you?
- G: Actually, I chose the Navy. I had my options and, not only that, I went down to Washington and said, I prefer some place exotic like Italy or Spain, so they gave me Guam. It was a chance of a lifetime to spend two years doing something. Rather than doing Norfolk, Virginia or someplace like that, I wanted to do something that was different. It was different and it was wonderful.
- R: What were you doing?
- G: I was chief of pediatrics.
- R: This was a Navy hospital?
- G: Navy hospital. I was looking after the dependents' children in the Navy. I was the only pediatrician on the entire island. You know, talk about anecdotes! I used to be able to help the community hospital, which was Guam Memorial Hospital. We used to get paid \$6.40 an hour. I'd do anything and everything that night. I was delivering babies, I was the coroner for the island. All at the same rate.

R: This was for the native population?

G: Yes, native population.

R: What sort of diseases were you seeing there?

G: You talk about a particular focus area, Guam has a high incidence of a particular neurologic disease. That, again, fortified my interest in pursuing a career in neurology. It had Amyotrophic Lateral Sclerosis [ALS], as a unique endemic paralytic disease, otherwise called Lou Gehrig's Disease. I was allotted, peripherally, with a research budget by some people from the National Institute of Health, to study such patients. I was involved, I did spinal taps for them in some of my spare time. They would see whether a certain drug would be beneficial. It wasn't. That's all right, I was involved.

R: Were they trying to figure out why the incidence was higher in Guam?

G: Yes, they looked for certain food substances that were unique that were pernicious, that were leading or could lead to a problem. Nothing was ever found. Or one of the other islands nearby, studies led to a Nobel prize-winning discovery, which is similar to mad cow disease. This was the Creutzfeldt-Jakob virus (or prior), and it was recognized, identified, on the basis of cannibalism by Dr. Gadjusek.

R: Was that discovered on New Guinea?

G: Yes.

R: Kuru?

G: Kuru.

R: Do they know whether Lou Gehrig's Disease has a genetic component?

G: It probably does.

R: There could be also be some environmental trigger.

G: Still is that, and there's, of course, the combination. You have the genetic potential and then you're exposed to some type of environmental substance.

R: Were people on Guam exposed to anything from nuclear testing or anything like that?

- G: No, no nuclear fallout that was contributory. Although the atoll, I forget the name of it, that was nearby, was up, so the wind could have brought it in. This was denied as being the cause. They were more focused on some of the indigenous plants and the seeds that came from these plants that might be contributing. Nothing came of that.
- R: It would seem particularly difficult to treat a disease like that in an area where they didn't have a lot of technology to support patients.
- G: [There was] nothing further to do with the patient, other than to help feed him and dress him. That's a family situation just like any group of people. If you love the patient, the person is well-cared for. By and large, that did happen.
- R: You spent two years there and then you're on reserve status for a time. Were you ever called up?
- G: No, never called up. I don't know what happened to my uniform. I was looking for it about a year ago.
- R: What was your rank?
- G: I finished up as lieutenant commander. I guess that's equivalent to a major. My wife still giggles at the time we drove through Treasure Island, which is the military base in San Francisco en route to Guam, and that marine saw my uniform at the gate, and practically chopped his head off as he saluted me. She still giggles in memory.
- R: Did you have to go through basic training and things like that?
- G: Basic training for the doctor was really nothing other than, this is the way you salute and you take your hat off in public and do your job as a doctor. We were not spit and polish.
- R: Nothing like *M*A*S*H* or anything, combat hospital training.
- G: We would laugh at that. There was a dignity about us, which *M*A*S*H* had, in its own way. That's as far as it went. It was the modus operandi that was similar, you did the best job you possibly could in an environment that was a little bit neater than out in the field. You were in a hospital structure.
- R: You had been thinking about neurology before, but that convinced you to pursue pediatric neurology. You came back in 1958 and started a fellowship in neurology. Where was this?

G: Columbia [University Medical Center].

R: What was involved in that? Was that research?

G: It was fundamentally patient-oriented. I did some studies which were published in standard journals. It was being involved as a doctor in charge of a group of patients who had a neurological problem. Part of that was the adult that was taken care of and part of it was the child, but it still was patients who had neurological problems, where there were convulsions and brain tumors and things like that.

R: This was a range of problems as well.

G: Yes, but it was in an institution which is the New York Neurological Institute which is a component of the Columbia Medical Center that was a building unto itself. The pediatric component was held at Babies Hospital, which was another building in that complex. I was with the big people and I was with the little people.

R: Was there a component of treatment for this, like surgery, for brain tumors?

G: Yes, the same general treatment approaches. You had surgery to remove a brain tumor that was benign. In other circumstances, we had a malignant tumor, we'd work with other treatment approaches that saved months of a patient's life, often at the expense of being sick, which is unfortunate. But other approaches came along, including the management of patients that had seizures with the use of new anti-convulsants, treatment of patients with seizures by surgery, identifying an approach for treatment of unusual diseases with whatever new approach, in terms of reducing intracranial pressure, that was available. These are several of the things I remember, talking to you about my experiences. Obviously, as time goes on, you think about those very impressionable times where those things stood out. There was one anecdote that I still tell my staff here. That is the perception of a patient that comes into the hospital. They put him into a bed and immediately there's a feeling of, I'm sick. They stay in bed. With the staying in bed, they sleep all the time. They are slow in their reactions, they're low in their tone. Their behavior pattern is almost regressive, like they've become a child. Walking on the Neurological New York Institute one morning, I saw my ward full of sixteen women and they were all in bed. There was a low tone and a murmur. I speak to one of them and I speak to the other. I get poor responses, inadequate. I stood in the room and the nurses were behind me. I said, this is enough. I will not tolerate this. I expect you all to be awake and ready to receive me when I come by tomorrow morning. I'm making rounds at 8:00, and that goes for all of you sixteen ladies. I came in the next morning and the nurses were hysterical with laughter. The women had gotten up at 4:00 in

the morning, they took showers, they put lipstick on, they had new nightgowns on. They were all set to greet me. In that ward, that month, there was the fastest turnover rate of any of the other wards. Implying obviously, a positive attitude towards oneself is a very healing process. I would have a patient that comes in with a stroke and the women in the next bed would sort of assist and make them feel more comfortable, recognizing I was coming in the morning and they were sure that my sick patient, even though she couldn't get out of bed, was dressed up and had her lipstick on and was ready to greet me. That was a positive approach.

R: Did you ever apply that elsewhere?

G: Yes, I apply it. Everywhere I go, I do apply it. I tell my patients, I won't tolerate you just moping around in the bed. Get up, get into the chair. On Tuesday, we sing. Sure enough, I'd come by the next morning and I'd sing to them. I sing to my students also.

R: Do they sing back?

G: They sing with me, yes. It's a matter of feeling positive. My eighty-five year old patient the other day, to whom I sang in clinic, looked at me and she said, doctor, don't give up your day job. [Laughter]. That's okay.

R: What sort of training or guidance did they give you in medical school about patient care or how to approach a patient?

G: Just listening to the person in the front lecturing, be nice to your patients, be kind, be gentle, be sympathetic, etc. Nothing that sticks. It's commonplace. You had that growing up from your mother and father, otherwise you wouldn't pursue a career in medicine. It's a giving profession and you've given to others all throughout your life. That's why you pursue a career in medicine. There's no reason not to do it otherwise, and to have somebody just give you a lecture, that's not effective. It's a matter of learning on the job and being a student and watching a professor who demonstrates the empathy that is needed to understand the patient's problem. They're all different. You can get a very aggressive, hostile patient or a patient who is overtly schizophrenic. How do you deal with that? It's very easy to deal with the patient who says, doctor I have a pain here, won't you help me? That's straightforward stuff. You don't need somebody who is a trained professional to deal with that. You just need somebody who knows how to deal with a broken bone. The art of medicine, that's something that is really needed. When the patient walks out and says, he didn't cure my migraine headaches which I've had for thirty-eight years, but he sure told me a lot and I feel more comfortable about it. I have patients who are former administrators, who are administrators of this institution. They still

remember having visited me with their chronic ailment whether it's a back pain or head pain or something like that. He didn't cure me, but he made me feel better. That's the essence. There's no guarantee that you, as a physician, are expected to cure. Your role in life is to improve, and if you can, do something that can eradicate an illness.

R: Do you think that medicine has changed in the way that physicians are taught to approach patients?

G: Depends on the teacher, depends on the student. We've always had that. I can talk to you about bad doctors. I could speak to you about bad lawyers. There are good doctors and good lawyers. The essence of it continues to be what you have within you, what drives you forward. Sure, it's not just wine and roses all the time. There will be bumps along the road. The essence of pursuing a career in medicine is that it is fun. You enjoy what you're doing because you're giving to others and you can derive pleasure from that. From my perspective, I get even more fun because I'm a teacher and that's a major role. If I wanted just to go out and earn a living seeing patients, I could do that without having to be involved in student education. That's not what I'm doing with my life. That's so important. If you get a student that reacts positively, boy, it's all worthwhile. You do get them, mostly. Sometimes you don't and that's unfortunate. The student should realize that, yes, studying is fun. Learning more and more about what's going on is what it's all about. You never stop studying. You never stop reading the journals or learning something more. If I have a resident on service with me who says, I'm going to use drug A or drug B, I said, that's unique, why are you using that? They give me an answer and if they don't, I said, I want to see where you get it from, so I can understand it. Keep your mind going. That will keep you young.

R: Your fellowship was patient care rather than research and you were there until 1961. That is the point when you came to the University of Florida. Tell me how you ended up here?

G: There were two elements that led us to the University of Florida. The first was [that] we were interested in going to a place that was similar to Guam, in terms of a climate where you didn't have to slug through the snow and it didn't get dark at 4:00 in the afternoon. You could raise a family. I was looking for an opportunity in the South, in particular. The second was the magnificent opportunity of coming to a new place. The University of Florida had just opened up. 1956 was the groundbreaking. Then they began their programs. It was just really at the beginning and I had the wonderful opportunity of coming here and have not regretted it since. As you might imagine, I have been offered to go elsewhere, as a chairman, but I elected to stay here for one reason or another. That is not to say I've been pleased with everything and everybody, but on the whole, it's

been a wonderful opportunity for me to grow and for my family to be here and to thrive as well.

R: Did you apply anywhere else?

G: I was being sought after. I was a hot commodity, so to speak. One of the places that was well known was Minnesota. A physician who was my mentor at Columbia said, that's a high-powered place, you would enjoy it. But he said, don't go in June, when they want you to visit. Go now, in February. I went in February and there I visited a fellow's family and his wife looked at me when I went into their house. She said to me, if your wife likes dressing the children four times a day in heavy boots and galoshes and sweaters and letting them go out and coming back in again and undressing them to go to the bathroom, then she'll love it here. We're still friends with them, but that was sufficient for me to say, that is not the place for me. And here I am in Florida.

R: Were you recruited by George Harrell [dean, University of Florida College of Medicine, 1954-1964] to come here?

G: George was the dean. My neurologist colleague who recruited to me is Dick Schmidt [chief of staff, Shands Teaching Hospital, 1965-1968; chairman, department of medicine, University of Florida, 1964-1966]. He became the chief of the division of neurology. Very shortly thereafter, he became chairman of medicine and I became the chief of neurology in 1962. There was a relationship that I had with pediatrics initially, but then in 1962, I took over the adult division and became a department head shortly thereafter.

R: You came in then, in pediatrics, in medicine.

G: That's right. Pediatrics and medicine, because neurology wasn't a department at that time, it was just a division.

R: When did it become a department?

G: 1974.

R: You were still in medicine through that period. You said you became chief in 1962. How many people were in the division at that point?

G: Four.

R: Dick Schmidt was one of them, for a period. Who else was there?

G: Arnold Nevis and Dick Weaver. We acquired more folks as time went on.

R: What was your impression of Dr. Harrell?

G: George was a wonderful fellow. He had a keen sense of presence. Where things were, how they were going. Gentle, didn't ruffle the waters. He had his firm opinion. His granddaughter is here in the department of medicine as a chip off the old block. She's a very smart lady, very gentle, very capable.

R: He was there for your first three years. He left in 1964. Anything else about him that was striking?

G: No. I was involved in terms of some of the committee discussions. Being a chief, I would participate in this. It was a matter of, let's get things going, we have to acquire grant support and do one thing or another. I was involved with the March of Dimes and the grant support that was coming forth from that. I was also doing some work with one of my colleagues with NIH [National Institutes of Health] support in metabolic diseases affecting the nervous system. I was participating. As far as the other issues were concerned, I didn't get involved with the interaction of the folks up the hill or [in] Tallahassee or somewhere else like that. That wasn't my bag.

R: This was a research and teaching position. Did you start out with a research program?

G: No. It was an academic position. As I have fostered [with] all the faculty who I asked to come on board with me, you've got several hats to wear. My job as a chairman is to give you time, so you could establish and foster a career as a academician. The time I give you is saying you're on service as the attending physician for several months of the year. You have to come in for several months in the afternoons or mornings. This gives you about 35 percent of your time [to] devote to pursuing a career in research. I brought you down because you had demonstrated an interest and experience in research. I will give you a laboratory and the wherewithal, from the standpoint of certain financial support. I expect you to produce. If you don't produce, then we have a tenure rule, we'll ask you to leave. That's the essence of being in academic medicine. You've got to put up or leave. I had my interests and I had a colleague with whom I participated in terms of my career goals. We had some grant support. We did work with the general area of metabolic problems that affected neurologic function.

R: [Second part of interviewing beginning, the date is March 26th.] Yesterday, we stopped right around the time when you had arrived in Gainesville. You mentioned collaborations on research. Do you want to go into that a little bit more?

G: Yes. My research activities that were an outgrowth of my collaboration with a radiologist, who happened to have been at Oxford in chemistry, led to certain important elements in terms of my academic career being fulfilled. It provided me with a new dimension with respect to my academic pursuits, namely that of the basic science being integrated into an understanding of nervous system function. This was Dr. [Clyde] Williams, who became the chairman of the department of radiology but still was an Oxford-trained chemist. We did work together, as you may see from some of the articles that we published, having to do with various elements of metabolic involvement of brain function. In other words, distorted metabolic changes that halted brain behavior and function. One noteworthy activity was that which we did with Parkinson's Disease. That has continued in one form or another where I've collaborated with some of our basic psychology people in dealing with Parkinson's/behavior basic research. That which I did with Clyde early in my career was noteworthy because it also established new grounds in an area that was about to [scientifically] explode and has continued to explode.

The fundamental issue with regard to Parkinson's Disease is that it is a clinical diagnosis manifested in a patient by slowness in function and tremor, a monotonous speech pattern, difficulty with all types of motor activity. It was in 1958 that two Austrian pathologists recognized that a portion of the brain was defective, from a standpoint of a chemical substance that should be there. This was a substance called dopamine. The concept was, let's replace the dopamine. How does one do that? You can't just stick dopamine in the brain. You swallow it, it gets degraded in the gut. You have to give its precursor and the precursor is a substance which goes by the acronym DOPA. The only DOPA that was available is a combined one which was an L-DOPA and a D-DOPA. Those that know chemistry recognize that the D-DOPA form is toxic. The L-DOPA form is what we had hoped for, but none was available. Clyde and I decided we would be heroic. This was the time before the FDA and its rules and regulations insisted upon us having a list of experimental protocols. We followed the guidelines that were passed down from hand-to-mouth since the 1800s. We were going to give it to a patient. D-L-DOPA combination. Before we give it to a patient, we were brave. We were going to give it to ourselves. But before we would give it to ourselves, we would give it to an animal. We called up the person that ran the dog lab. Al, do you have a dog we can give a pill to? Sure. So one Thursday morning, I went down and gave a dog one gram of D-L-DOPA. Called up Al the next morning, on Friday. Al, how's the dog doing? The dog is fine. So that morning Clyde took one gram of D-L-DOPA and I took one gram of D-L-DOPA. All this was in preparation of giving it to a patient. We came back on the weekend on Monday morning. There was a message. Please call the dog lab. The dog had died. We still don't know why. Since Clyde and I were still living, we decided to give it to a patient. We did. Nothing

happened to the patient. We did some publishing on the fact that he excreted this that and the other in the urine. This was 1962 or so. In any event, it was only later in the 1960s that a fellow named [George] Cotzias [doctor, worked with patients with Parkinson's disease] discovered that you don't just give one pill and you have to give L-DOPA. Giving it for a month helps the patient because the brain metabolizes things so much differently than other tissue. He was the fellow that began to recognize that it is the mainstay, currently, in the treatment of patients with Parkinson's Disease. L-DOPA and its combination drugs. And that's what we used. That's very effective in helping patients.

As time had gone on with Clyde as well as with others, I had been involved with the projects where my input was predominately clinical. What happened to the patient from a clinical perspective. I also was involved with some elements having to do with the basic chemical component of the activity. Chemistry was the area of interest, measuring chemicals in various diseases, like neuroblastoma, behavioral tendencies, doing work later on with mitochondrial diseases. All of these came to pass. I was not the primary chemist involved with the research. I was the clinician who had input and gave some type of guidance to where we were going.

R: You did publish a fair amount on neuroblastoma. Describe what that is.

G: Yes. It's a tumor. It's a secreting tumor. A tumor is a lump, but some tumors in the body can secrete compounds which can be detected. It's a helpful way of determining the presence of a tumor, its growth pattern, whether it is cured or not by assessing the excretion of these chemical compounds in the urine and also the blood. That's something which we pursued, for among reasons that were of interest, we had a focus of children who had neuroblastoma, which the CDC [Centers for Disease Control] went down to look at in the Leesburg region. It was way out of proportion to the usual numbers per patient population. Why was it all in the Leesburg region? We never got an answer to that. It since has quieted down. With the group of children who were there, we were able to do some studies and follow the course of the children from a clinical perspective and also measure these compounds that they were excreting from the tumor.

R: You have a 1963 paper, Homovanilic acid. That's a diagnosis. Is that still used as a diagnosis?

G: Yes, it's also one of the compounds excreted in the adult tumor that's associated with high blood pressure. It's a tumor called a pheochromocytoma. It's a tumor that is associated with high blood pressure and [if you] measure homovanilic acid, as well as another bunch of products in the urine, and you say, ah-ha. That means that the reason for the high blood pressure is that you've got a tumor somewhere.

R: That fits in then with your papers on hypertension.

G: That's a different kind of hypertension. The hypertension I published on is where there's pressure in the head. That's not so much a chemical paper as it is a clinical paper, trying to correlate conditions where pressure in the head is increased, in some circumstances. It's identified as a result of a blockage of a vein as a result of infection in the ear. At other times, it occurs spontaneously, particularly in very large people. Nine out of ten of the very large people who have this pressure problem in their head are women. Why should large women develop increased pressure in the head? We never found out. This was part of my activities.

R: You were in the college of medicine at the University of Florida, in the division of neurology, at this time. How large was the department of medicine?

G: I would suspect they were about thirty, it has burgeoned since then, as you might imagine.

R: Hundreds now?

G: I think it's close to 200.

R: What were the interactions like between faculty?

G: I came from a training program in New York City where the attitude was often very different. It was not as collegial, it was not as cordial, it was not as friendly, it was not as open. I remember going into a lab in New York and I was chased out because I might steal some of their ideas. Here, it was wonderful. What can I do to help you? Let me show you this? Isn't this an exciting thing, etc? All of these things. It was a matter of recognizing that we all belonged to one big family. Those early days when there were gatherings of the faculty, about a total of seventy or so faculty people in the entire college of medicine, we would get together, picnic or something like this. Everybody knew everybody. Those days are gone, for obvious reasons. We were young faculty. Except for George Harrell, the rest of us were youngsters and we grew up together.

R: Part of his strategy was to find rising stars.

G: Yes, but that was part of the strategy across the country because at that time there were new medical schools being built. To bring in old faculty was okay, but you needed to provide a basis that would then survive and grow. There weren't that many old faculty around.

R: There weren't enough to go around.

G: It was a very fortunate time in my career that the University of Florida was opening. I was interested in coming, as I mentioned, to the South.

R: I guess young faculty are probably cheaper. What was your salary in the early years? Was it competitive with the rest of the country?

G: A little bit lower, but it was still competitive. It was \$14,500 a year. I had been making less, as a trainee prior to that, so it was a nice salary. It was a living salary. It allowed me to buy a home for \$25,000, raise a family.

R: You had two children, at this point?

G: Yes, I had two children, two boys and the third one came along the first year I was here, that's my girl. Then my last one came in 1966.

R: What was Gainesville like? Obviously, the college of medicine was a lot smaller, but the town was pretty small too.

G: Yes, it was a college town. That made it so much more attractive. Everything revolved around what was going on with the college. As now, but not at the same scale. We had the opportunity of participating in many of the college activities, which is a little bit more difficult now. As such, we were closely involved with things that went on, not just football, but everything else. The entertainment activity, participating in arranging visiting musical programs, all that was part and parcel of what we would do. It was a constant business of going with the faculty here, there, and being involved with people in political science, and people in English literature. In addition, obviously, to being part of the college of medicine, which is our home base. We had more involvement, at least I did, personally, at that time.

R: I've talked to some of the students in the first class who graduated in 1960 and they really liked the fact that it was such a young college and that they had a lot of contact with the faculty. Did that continue?

G: It depends on the individual faculty person. Absolutely, it happens. You have to appreciate that the individual who is going to devote his or her career to an academic pursuit will have as a goal, not just enhancing his or her own career through research, but to participate as a teacher. A good teacher, a good academician, is the one who continues to foster the development of the student in every way. That's what we do here, at least our department does. As individuals, we enjoy it. I still go to clinic. I still enjoy being with students. I have students working on patients with me. Two days ago, one of our lady

students who finished rotation came up to one of our secretaries and wanted to know, does Dr. Greer sing to you like he sings to us in clinic? The issue of trying to infuse a sense of happiness in their careers, is basically not done intentionally. This is my modus operandi in terms of being involved. I do try to purvey a feeling of not just being a big guy in a white coat who's got a title, but as somebody who also provides many other elements to the patient, including being a father figure, someone who provides succor and advice and guidance and treatment. As I mentioned to you, medicine is not all [about how] we cure you. We provide help. To help a student appreciate that, that's critical.

R: In the early years, what were your teaching responsibilities or obligations? Did you do any classroom teaching or was it mostly bedside instruction?

G: It's the same as it is now. We teach 200 at a time in a classroom, which has a lot of drawbacks. We teach in conference rooms, on certain topics, to fifty or twenty-five people who are there. Then teaching at the bedside or in the clinic. That's the most fun, that's the hands-on approach. This is where the student is on the stick, if you will. Go in there and examine the patient and get the history and come out and talk to me, tell me what you found. The student will do that. Then I go in the room, that's the typical clinic approach. This is what I did yesterday, for example, and tomorrow. I try to understand what the student elicited, from a historical standpoint, then I will begin to bring forth other information which the smart student picks up on immediately and recognizes I should have done that, I should have asked those questions. I should have been smart enough to realize that the superficial responses, those superficial questions I gave, needed to be dug at. That's the purpose of this type of approach. For me to stand up in front of a group of 200 and say, hypertension is the following, is ridiculous. That's why I don't like doing that. You don't go to a standard textbook and read about hypertension or diabetes and what have you. This is your patient, find out about your patient, ask the appropriate questions, find out about this particular patient's problem, the interactions of the patient's family, their sleep pattern that further alters the patient's functionality. Their read. That's the way to teach. It's expensive, obviously, for me to spend all this time with one student. But that's the important thing and you have the student go away with an understanding of maybe I need to change my approach.

R: Obviously, classroom teaching is more theoretical and this is really not just the knowledge, but also techniques.

G: Techniques, that's right. It's the art of medicine.

R: What classes did you teach?

G: Early in my career, I was involved with pediatrics as well as straightforward neurology. It was always with a neurological slant that I would teach pediatrics. I would teach newborn growth and development, problems of the child growing up, including epilepsy and problems with regard to learning disabilities. These are some of the topics. In terms of adult teaching, it was the classical discussion of headache, stroke, things of this nature.

R: That would be at the lectures?

G: Yes.

R: You described about bedside teaching as modeling, where you're not telling them what to do, but you're showing by example. When you were a student, did you have someone who did that for you?

G: Yes. Not all my student relationships with professors were positively memorable, but I took a lot away from it. It was something that held me in good stead, for me to sit back there and have someone criticize me was important. It was not something which I resented, it was a matter of pointing out flaws toward the end of making me a better doctor, I felt. I have memories of somebody coming in and saying to me that my patient had an abnormality, which I did not tell him about. Look at this number, he pointed out. The patient had a slightly hypertensive value. These are important things to remember. He said this with ponderous commentary. This is fine, particularly for a student. We medical students are so very compulsive that if you don't do everything you're supposed to do, it's a blemish on your escutcheon. You didn't do well, you stupid-head!

R: They'll flog themselves as well.

G: Yes.

R: When did you start singing or was that something that you've always done?

G: The singing is a family heritage. This is something that my mother in particular, and my father [did], both loveable people. When my wife came over to the house when she was not yet my wife, [she] was actually astonished to see my mother and father, both in their fifties, singing and dancing together in the kitchen. That was something that we did. Now, my wife didn't come from such a family but she was a singer in terms of [doing it] for personal pleasure. Raising our children, [singing] was something that was a terrific way of being together. We'd drive in the car and try to not just distract them from hitting each other in the backseat, but to see if we can sing songs. We taught them songs. It just is wonderful. We sing at the drop of a hat, as a family. We sign songs of all types. We sign Gregorian chants, *Dona Nobis Pacem*, that's one of our

favorites. We sing songs from musical comedies. With our grandchildren coming along, we have a whole repertoire of songs that we have taught them. My children are teaching their children how to sing. My last son got married up in the Boston area, they had a big place that we had a rehearsal dinner that we were responsible for. About 200 people there, having dinner. People made speeches, but not our family. I had the entire group get up, and one of my granddaughters was standing in front of me, and we sing "My Hat It Had Three Corners" to the ensemble. It was great fun. This is the spirit that we have in our family, to live and enjoy life. You asked when I began singing. It's always been part of my repertoire.

R: It's not just when you're doing rounds that you're singing?

G: Nope, the drop of a hat will get me started. This astonishes people who hear me because those who know musical comedy, there's a beginning of a particular song that often is a manner of speaking. I'll pick up on the words, just straightforward words, but they happen to have been the beginning of a song in a musical comedy. I'll pick that up and sing the song. The person who is talking to me is astonished. What are you doing? Are you crazy?

R: What song is this? You have my curiosity peaked?

G: It'll come about out of the blue. Even Gilbert and Sullivan [Sir William Gilbert, 1836-1911, and Sir Arthur Sullivan, 1842-1900, librettist and composer of light operas] is something that we do. You talk for awhile and I'll pick up on something and start singing a song.

R: Do you play a musical instrument?

G: No, wish I did.

R: You were doing classroom teaching in the early 1960s and taking students on rounds. Were these third-year students?

G: Yes, predominantly the third year. We have elective fourth-year students and we even have, from time to time, the undergraduate who expresses such a keen interest and really is devoted, I give him a white coat and say, okay come around. Sit in the background and watch us do our thing. Put him to work too, sometimes.

R: You arrived in 1961. Harrell left in 1964 and Manny Suter [Emanuel Suter, dean, University of Florida College of Medicine, 1964-1972] came on. Was there any change in the focus of the medical school after Suter became dean? What changed?

- G: Manny was a basic scientist. His perception of the clinician was that perhaps we weren't that smart or as capable. This is the way I felt. He supported the basic scientists through the neglect of the clinician, I felt. Perhaps others did too. As an example of this, every year at that time, the state legislature used to provide raise money to various colleges of arts and sciences and so forth. Raise money came every year to the college of medicine. Manny's concept was that we'll give the raises to the basic sciences, we don't have to give the raises to the clinicians. That hurt, as you might imagine. The same was true when we would have meetings and discussions about problems that existed. He was not able to comprehend certain issues that the clinician had to face. His mind was focused on the fact that basic research and money needed to be spent to have the guy in laboratory advance his career. That had to be matched with what you're doing here. If you're here in the college of medicine, it means that you just don't stick in the laboratory and do your thing. You might as well be in the Rockefeller Institute or someplace else, away from the madding throng, away from clinical work. That's an argument. I didn't open up my mouth too much at that time. I became a persona non grata subsequently, when I did open my mouth. At that time, it wasn't that way. He was a well-meaning fellow but he had his own way of doing things, which didn't go well with me.
- R: Is that a continuing conflict, whether the focus is on education, basic science, clinical work or some combination of them? It does seem to change depending on who's dean.
- G: Yes, there's a focus that will change based on the dean's priorities. However, it's a matter of juggling the balls, in case you have to be in that untenable position called dean. It's hard, you can't please everybody. It's all well and good to make the faculty happy, be fair and honest to discuss what it was. My favorite dean was a fellow named Al Stetson [Chandler A. Stetson, Jr., dean, University of Florida College of Medicine, 1972-1977], who came right after Manny. Al was a pathologist. He was also a basic scientist, but he had a flair for appreciating the overall scheme and the issues we [had] in clinical work. Yes, he was my favorite. Gentle man, honest man, accessible man. If he couldn't do anything, he'd say, I can't do it, but you're right and we'll try to do something for you in the future along those lines.
- R: How long was he dean?
- G: I think he was dean for more than four years. He died in office. It was a tragedy. Wonderful man.
- R: Dr. Harrell seemed to want to foster generalists. Didn't he have all the clinical faculty do general rotations?

- G: That was something that at the time, was mouthed as the direction for this institution. Indeed, there's a college of medicine that's being put up in Tallahassee toward the end of that same thing. We need more generalists. The heck with these specialists. We want to put out the generalists in the community. That was something that the state legislature was interested in supporting. Not the neurologist. He's too highbrow, he's too specialized. However, the strength of the college of medicine rests on its scientific activity and inquiry and what do we do, we deal with complex situations, provide a resource for the state of Florida, its population as well as its physicians. Unless we have neurologists here, and all we have is a bunch of generalists, what is the difference between us and the guys in the community? Who's going to be doing the research that's going to advance the frontiers of science? Generalists? No, the specialists. One mouths this concept to appease the legislature, who is being screamed at [that] we don't have enough general doctors to take care of the patients' needs. We need more grandmothers rather than more generalists because the grandmother is sufficiently capable, on the basis of her knowledge, to deal with the everyday problems and the colds and the sore throats. She can't deal with the stroke. I deal with the stroke. That is an important concept to appreciate. Well, they can always go up to Johns Hopkins or Massachusetts General Hospital if they have complex problem. It's not our problem, says the state legislature, we want to put out generalists. Foolhardy. We, at this institution, are competitive with any institution in the world, as it pertains to specialists. I can speak for my speciality, that's us. We're not provincial. We have a national and international reputation. We talk all over the world. We present data. We do exciting, interesting things that are unique in this world. Support us, encourage us, don't relegate us to saying well, we also do research, but that's not important.
- R: You've had a number of awards for teaching excellence. Can you talk about them? I guess they have been scattered throughout your career.
- G: It's nothing that was sought. It's just, I guess, one of the things that comes forth from appreciative people, students, and so forth. On the national scene, the same is true based on my publications, based on my presentations. I have also been involved with elements of our major academic society. The Academy of Neurology is the major body of neurologists, [there] must be about 18,000 now in the United States and Canada. For two years, I was president of that organization, having been the treasurer and the secretary, being involved with the political wherewithal. In that capacity, I did hold office and was involved as the spokesperson for neurology. This is for the media, also for Congress. I had fun. Brought my wife to some of our meetings. One time it coincided, when I was president, with the opening of the Royal Society of Medicine. They had a building that existed for a hundred years. They built a new structure and the

patron of the Royal Society of Medicine was Queen Elizabeth [Queen Elizabeth II, Queen of the United Kingdom and head of the Commonwealth, 1952-present]. All the major societies were invited to send representatives. I happened to be president and, of course, my wife jumped at the chance to buy a new outfit so we could go and see Queen Elizabeth. We also paid for two of my children, who had time off. We went to London.

R: What year was this?

G: It was 1986 or 1987. We were in the place where we were supposed to stand until she and Prince Philip [husband of Queen Elizabeth II, 1947-present] came. It was just very elegant. There she came and nodded at us. Prince Philip stopped to speak to some of the Americans.

R: Did he speak to you?

G: Yes. What's your name, where are you from, what do you represent?

R: That's exciting.

G: Yes.

R: Did the queen actually shake your hand as well?

G: My wife spent at least three days learning how to curtsy. No, she didn't shake hands when she was there. [We] went to where they had the little speech and then she left. That was very elegant.

R: That's exciting, as well. Have you continued to work on pediatrics, or have you focused more on just general neurology?

R: About 15 percent of all my patients are the pediatric age group. That includes the late adolescence co-ed who has migraine headaches. By and large, it's been the adult that I've been involved with in terms of patient care.

G: Is that a matter of choice or is that just the way it turned out?

R: It's a matter of choice and this has to do with the issue of the department of pediatrics having its own approach to doing things. There were problems with a former chief of pediatric neurology who was appointed by the department of pediatrics. All along, my concept was and still is, [that] in most institutions pediatric neurology should be a component of the department of neurology. We have the same area of involvement that needs to be enhanced. That's the way to do it. The department of pediatrics has its own concept and prerogative.

- R: When you first came, was there such a specialization as pediatric neurology or has that come as the college has grown?
- G: It's always been there, it's always been a sub-specialty. In pediatrics, you have the pediatric pulmonologist and pediatric hematologist and so forth.
- R: Was it a function of the way you were hired that you ended up more in neurology in the early years and didn't switch over right from the start?
- G: I was with both, initially. I had a joint appointment and I had a primary appointment in pediatrics. In 1962, when the then-chief of neurology became the chairman of medicine, I was asked to take over the neurology program. That was the switch that I made and that persisted. I have been in charge of neurology from 1962 to 2000, that's thirty-eight years.
- R: You were the chief until 1974 and then it became a separate department.
- G: Independent department, that's right. We were acting independently all along, doing our thing, having our own beds, having our own residency program. It helped us, financially, to collect our own money and keep it and spend it, with the dean's approval, the way we felt it was to be spent. If I want to hire somebody else, I didn't have to go through a chairman of medicine.
- R: It didn't have anything to do with size, then. How many were in the division?
- G: It continues to grow. Initially, we had four people in the division.
- R: Basically, when it became a department, you had more control over funds and things. Did anything else change?
- G: I think a psychological change came about. As a matter of saying that we have to prove ourselves. We certainly are able to stand independently, we're able to be productive, we're able to be competitive. This was manifested by our reputation on the national scene. We acquired new people, we augmented the program by getting support staff that was necessary, which we couldn't get before because the department of medicine had its priorities, that type of thing. That allowed us to blossom. It was not just seeing more patients, that came as a natural course. There was a spreading of our academic wings and showing that we did have the wherewithal. We did exhibit a real dynamic force as it related to those areas that we had expertise. One of the most important achievements of this department has been the acquisition of its outstanding faculty. One person in particular is noteworthy, that's Dr. Kenneth Heilman [professor of neurology, University of Florida College of Medicine; chief of

neurology, Malcolm Randall Veterans Affairs Medical Center], [who] is an outstanding researcher in a particular field, called behavioral neurology or cognitive neuroscience. Fundamentally, it has to do with what makes us humans, how language is created, understanding emotional responses and so forth. Ken has done a superb job. He has a group of scientists who are working with him, fellows and associates, M.D.s and Ph.D.s. He is involved with publishing, getting grants, writing, presenting internationally. His people who have been with him have also achieved great fame when they leave and function in their own institutions. When you speak about the University of Florida in terms of its accomplishments, many people, if not all, will say, you mean the department of neurology and Ken Heilman. That's right, that's what we mean. It's fun. For the student who is uninitiated to come and listen to our grand rounds, it's great joy. You come there and we perform extemporaneously. In other words, it's not that somebody's going to stand up there in front of the group and talk about a particular illness. You can read about a particular illness in the textbook. To have a patient presentation and then to have the participation of the group and the audience and Dr. Heilman in particular. Each of us starts talking, as you have been listening for now two days, off the top of my head, based on knowledge, experience. That has been one of our most noteworthy achievements, to bring in Ken Heilman. This is why we get such excellent resident candidates. There is a medical student from Missouri or Oregon, somebody who says, I'm interested in behavioral neurology, where should I go for my neurology program? We get that candidate's application right away because they know about us. We have other noteworthy strengths. We have a big program in epileptology and neuromuscular disease. That's fine. For the layman, we are not the Mayo Clinic or Johns Hopkins or Massachusetts General Hospital. But for the neurologist, elsewhere, we are equivalent, if not better, particularly in certain areas. They know where to send patients.

- R: You were chief and chairman of the department for a long time. What was your vision? What were your goals for the department? Did you have a particular direction you wanted it to go in?
- G: I had the wherewithal, the intellectual manpower to then begin to thrive and to recognize in my own mind and instill in others what we are all about. This is an academic commitment and it's multiple in terms of goals. You have to teach, you have to pursue research, you have to see patients, you have to undertake community service, all of these things. That was our lives. To be excellent in these areas was our goal. Sure, we fell on our faces from time to time, but we picked ourselves up and continued. Through it all, as you have tried to elicit from me, there's a spirit of joy that pervades.
- R: What is a typical day like for you?

- G: I get up very early and that's because I can't sleep long. I'm in the office before 7:00 [A.M.] usually every day. That allows me to organize what I need to organize or do certain things that I put off from the day before, dictate patient data. As the morning wears on, 8:00 or so, I begin with the staff and give them directions in case I have to do it, or just jump over to the library [if] I need to do that. When I'm on service, as I am this month, I begin making rounds at 9:00. I'll be up there with the residents and the students and we'll see patients who are on our service. We'll go see consultations and that will take us from about 9:00 to 11:00, give or take. We'll drop by radiology and EEG [electroencephalogram]. See whatever consults need to be seen. I may give a little spiel to our folks on a specific topic. 11:00 comes and I come back here. By that time, we have a bunch of messages, we may have a little bit of mail, have to answer some pertinent questions that I couldn't ask at 8:00 because nobody gets in their offices at 8:00, so I'm on the phone speaking. Along comes noon and I'm off to clinic. I'll stay in clinic until about 4:30. Then after seeing x number of patients, I'll come back here and once more I have messages and mail and things like that. I try to take off so I can be home with my family. I say family, now it's just a wife who is with me. That's it for the day.
- R: Was that typical pretty much throughout your career?
- G: Yes, that's been typical. Now, I do other things. I may travel for a day, but always try to come back on the same day, unless I'm traveling with my wife. Often, I do work at home and this is not uncommon, so those patients that I'll see, I take their charts home with me and work on the telephone or dictate into a transcription service. We have a major problem at home, the computer is hooked up to the telephone outlet, so I can't talk if my wife wants to use the computer. So we take turns.
- R: You don't want to get another phone line?
- G: We could, but we're too lazy.
- R: Did you ever maintain a research lab?
- G: Yes, I had a little lab at one time. It was something that, unfortunately, I could not put too much time and effort into because I had other administrative duties. Taking over responsibility for a division and then a department took up a lot of time. Something which I sacrificed was another direction, a career that would allow me to thrive in a test-tube type laboratory. The result, I felt, was appropriate.
- R: It didn't seem to affect your rate of publication.

- G: No, again, it was a matter of collaborating, [that] was the issue there. I have several things that are independent, but many are collaborative efforts.
- R: You've published a lot of chapters in textbooks and things like that. I guess that's less collaborative.
- G: Yes, that's all independent work, but that's a review issue. It's a matter of talking about a particular topic, so I go to the library and research somebody else's work and put it into review. That's what textbooks are all about.
- R: We discussed your research focus in the 1960s. You did a lot of work with measuring metabolic products or by-products. Did that continue?
- G: Yes, that was basically the direction I was going, to assess for purposes of diagnosis establishing treatment and recognizing how to gauge the patient's condition as time went on. That fundamentally was the type of work that I did in the laboratory with research.
- R: Did you do any work on metabolic disorders that cause neurological problems?
- G: There were a few of those. For example, I published at one time on esoteric disease where an abnormal compound was excreted in a patient who had a metabolic problem. At one time, I even looked at melanoma as a tumor, seeing what was secreted there and using that as a marker for the presence of recurrence in melanoma elsewhere. These are the things that I've touched upon. Wasn't earth-shaking basic science work, it was a matter of recognizing a particular area of interest in metabolism and biochemistry.
- R: Would this come about when you might have a patient with a particular condition?
- G: Or patients, yes.
- R: Did you seek out certain patients then?
- G: Yes, the neuroblastoma, for example, early in the career. We would tell our colleagues, if you have a case, we would like to participate in understanding the problem further. Subsequently, we worked with drugs, [which] were not available except in clinical research facilities for the Parkinson's patient. We were asked to be involved with care of patients from elsewhere for that particular reason. That was a part and parcel of what we continue to do in terms of being a speciality unit for complex and difficult to treat patients, who have neurologic problems.

R: You're still working with Parkinson's and L-DOPA is still one of the treatments used. What other treatments are being developed?

G: Although other drugs are coming along, which are designed to affect the receptor site in the brain, they still are not as effective from a standpoint of drug management as L-DOPA preparations. The [plan] that we're going to get involved with more heavily is a surgical approach. There are two major types of surgical approaches. One is a destructive approach, to create a lesion in a certain part of the brain and hope that will benefit your patient. The other is a stimulating approach, where you put a wire in with a battery attachment and then stimulate that. That's a device also that has patient input. If the patient feels that they are slowing down, they press a button and the brain is buzzed. Both of these approaches are not without risk, not without failure, not without concept of it may work, it may not work. More importantly, we don't know what's going to happen two or three years down the road after somebody enthusiastically says, I've got a cure for your Parkinson's disease, just let me drill a hole in your head and put something in.

R: It doesn't necessarily stop the degeneration.

G: We're not getting at the cause but the progression. It's like any of the degenerative diseases that we deal with, whether it's Alzheimer's disease or something else of this nature.

R: Do you think there are multiple causes?

G: That's one theory. We always work with the concept of a genetic predisposition plus some agent that comes from the outside that's going to cause this, for example. In Alzheimer's disease, we talked about apo-lipoprotein allele. That's a substance in your blood and mine that helps carry cholesterol around and has to do with lipid metabolism. If you happen to have that particular allele, you are more prone to developing Alzheimer's disease, but what is it from the outside that tips it off?

R: Could be diet or some chemical exposure?

G: So many things have been incriminated because of Alzheimer's Disease whether it's aluminum or well-water that's high in cadmium. You pick it, it's been discussed. Trauma, I'm involved with that from time to time where I may be an expert legal witness. Ever since that whiplash injury, the patient is left to deteriorated and has Alzheimer's disease and the family will blame it on the accident.

R: Do you testify that is a possibility?

- G: No. I a defense witness and I said no. Because if it were that, then every patient over the age of fifty is going to have to wear a helmet.
- R: Have there been other conditions that are now emerging, but were once classified as Parkinson's?
- G: Yes, we have what is called a Parkinson's disease, named after James Parkinson. It has a certain characteristic feature that you can detect, where the patient has a tremor, is slow-moving, has rigidity. Then there are Parkinson's syndromes where the patient does not have the classical features, but has other elements. We talk about it as Parkinson's syndrome or the Parkinson-plus conditions. There are several of them. They don't respond to L-DOPA. That's one of the ways of distinguishing [between the conditions].
- R: [This is the third stage of the interview with Dr. Greer. Today is the 28th of March.] I wanted to talk about the chairmanship and issues of developing the department and fund-raising. Obviously, individuals who are carrying out research do their own grant-writing, things like that. Did you have any strategies for raising money for the department?
- G: The individual faculty member was expected to undertake research to prove himself or herself in a career as an academician and accept that monies to undertake this research were not to come from the coffers of the department because we were restricted in the amount of money that we have available, beyond what we would call seed money. New faculty coming in who applied to the university for seed money, something like \$1,000 or \$2,000, which was less than optimal for anyone who wished to get going. We did provide some help and then, through the knowledge of what other resources were available, from the NIH or other foundations, we [helped]. Those of us in the department who had this experience would guide the new faculty person into where they might go to seek such funding. My personal involvement with each faculty person was, again, to emphasize the source of money based on the type of activity that the faculty person was undertaking. For an epileptologist, for example, the Epilepsy Foundation of America would be a place where a source of income would be generated for a particular study, in addition to the National Institutes of Health and anywhere else. That included foundations which might be potentially interested in supporting individuals. Our biggest problem obviously was [when they brought] a new person on board who [did] not have a track record. You have to start from scratch. It's a matter of achieving some degree of fame on the basis of presentations and so forth. The other areas where I would seek funds would be as diverse as the Academy of Neurology and then I'd start [with the] private foundations. Then monies that [came] from the Florida Foundation, which represented donations from patients, would be possibly ear-marked for research in certain areas. [That] continues in the present time when we have

grateful patients who contribute money to help the department to function. Using a very small grant that was given by a grateful patient at the present time to allow me to photocopy articles from the library. Of course, with faculty who had come fresh on board, it was not unusual for us to have such a person start a career in conjunction with someone else who has really been in the field and who has a grant and that other individual writes a grant with the younger person.

R: You ended up with an endowed professorship in 1991. Was that a grateful patient or the family of a patient?

G: Yes, the family of a grateful patient. It was something that was spoken about and I pursued it with the foundation staff who went down with me to speak to the faculty. The name of the individual, through the means of an endowed chair continues. Sometimes it comes about out of the blue I was told by the dean that there was a person that wanted to endow a chair to pursue other neurologic research projects. This also came to fruition.

R: You mentioned earlier Dr. Heilman and all the programs that developed from hiring him? Was that a conscious decision on your part?

G: No. It was a matter of recognizing somebody who had talent and then helping to nurture it. It was just a piece of great fortune that he came to us. He came from the Boston area and decided that he would come to this part of the world to establish his career. Mentoring is something that he and I both think about as being one of the goals of the academician. He considers me as his mentor, whereas he has been the mentor of so many others in terms of their pursuits and careers. He has thrived here. I'm not taking credit for it, other than to have the listener understand that the goal of the chairman is to provide emotional, financial, and particularly time support for individuals to do their thing. That's exactly what I did. I would let them know that I was here. He'd do what he could do. It was not foresight on my part, other than to recognize that I had a talent who I wanted to bring down.

R: What role did the neurology department or did you play in developing the McKnight Brain Institute?

G: Really all the credit goes to Bill Luttge [executive director, McKnight Brain Institute of the University of Florida; professor of neuroscience]. He recognized a request for a proposal that came in one of those brochures that he gets all the time about the establishment of the Brain Institute by the Department of Defense and applied for it. Bill was a very capable scientist and administrator. He solicited information from a variety of departments and put together a package. It was the construction of the package that was really a seller. It was a competition, as you know. Do you know that story?

R: No, I don't.

G: It was a congressman from the Dade County who pushed forth a proposal so that the Department of Defense could establish a program which was designed to understand trauma in the nervous system of patients, with attention on the spinal cord. There is a former football player from the Miami Dolphins named [Nick] Buoniconti whose son was a high school football player and developed paraplegia as a result of trauma. He has fostered the development of support for such individuals. He evidently obtained the help of a congressman to establish a project sponsored by the U.S. Department of Defense. The request for the proposal was eighteen million dollars. I don't know how many other institutions applied for it. But Bill Luttgé's proposal was much better, and the University of Florida, instead of the University of Miami received the award. With that money in hand that could be used as seed money and then attract matching money from elsewhere including the state. That was an initial eighteen million dollar grant. He built a building for sixty million dollars or so. The McKnight Foundation most recently made a large contribution, the McKnight Brain Institute is our new name.

R: What about the movement disorder center? Whose brainchild is that?

G: I think that's just a title. We hope that will attract extra funds. We have been doing so-called movement disorder assessment in patients all long—those that have Parkinson's disease or the syndrome. We pursue collaborative work from the scientific standpoint as well as from the clinical standpoint in studying such patients. As an example, we have a project and are involved with cognitive assessment in patients with Parkinson's disease. At one time, I was working with Dr. [William A.] Friedman [professor, chair, department of neurological surgery, University of Florida] in neurosurgery. [We used] surgical treatment of the patients with Parkinson's disease. We have been a Parkinson's disease center and that is something that was sponsored by the National Parkinson's Disease Foundation in Miami, where for each of five years, we received \$100,000 to undertake our activities.

R: Do you study other conditions?

G: We've always studied multiple conditions. That's what we do as a matter of routine. That is something that will hopefully bring us more funds to pursue more research. We are currently looking forward to having one of our new faculty on board who has been studying for a couple of years in another institution. This person's particular interest is in Parkinson's disease and related disorders. The new kid on the block will enhance the program, we believe.

R: That's Michael Okun?

G: Yes.

R: When were you collaborating with Dr. Friedman on speech and movements?
Was that in the 1990s?

G: Yes.

R: The work on Parkinson's has really been ongoing from the 1960s. To summarize, your research interests have been Parkinson's, the metabolic conditions and how they affect the brain or how they can be used in diagnosis and treatment.

G: Yes, I think those are areas that have been of particular interest.

R: Any particular reason why those caught your eye?

G: No. I think in this circumstance, it's serendipity. I had in my early medical school career participated in some project of biochemical origin. I also worked some with them in Guam. I started with a project that was funded by the NIH having to do with metabolic conditions that affected the brain of the child. Parkinson's disease was once more an outgrowth of something in the metabolism or biochemistry of neural tissue. That's the general area of involvement. In other words, I'm not someone who's doing research in physics or MRI or stroke processes, although I've written on topics such as stroke, for example. I think the other areas seemed to have attracted me from a standpoint of research pursuits when I was doing it actively.

R: What would you say are your major achievements in terms of research?

G: I don't call myself a primary bench researcher. I think I have participated in multiple areas. I have presented my work at national and international meetings. I have done things that I'm proud of, in terms of particular papers that reflect the process that I elaborated upon. But I don't think it's anything that's outstanding. I think it should be appreciated that early in my career I undertook a major responsibility as an administrator. Beginning in 1962, I took over being the chief of the division. Time commitments on my part were a constraint. I was not someone who was able to spend extensive periods of time in the laboratory. I had a budget to participate in. I had turf to defend. And various other [duties?]. All of this put a time limit on the number of hours that I could devote to research. A need for a guiding hand to be present all the time. It's not unusual for me to be away at a meeting that would last two days. Coming off a plane and going to the office and spending hours doing patient dictations and

reports until 4:00 in the morning [trying] to catch up. That was, if you will, a compulsive obligation as the chair. I've relinquished that without regret.

R: Would you say that the development of the department was the most satisfying for you?

G: Yes. This is an outgrowth if you will of my paternalism. Perhaps I've been criticized by some for being too paternalistic. My coronary artery bypass was a huge shock, not just to me and my family, but to the staff who were very much affected by this. The mountain was crumbling.

R: When did you have the surgery?

G: 1997.

R: Did that have anything to do with your decision to retire as chair?

G: No.

R: When did you go back to being a professor?

G: It was the fall of the year 2000.

R: You now have the titles of professor of neurology, pediatrics, and psychiatry.

G: Those are joint appointments, the latter two, yes.

R: How do your interests overlap with psychiatry?

G: Fundamentally, it's a matter of the interactions of the educational program. We train their psychiatry residents who come on-board with us and that is a major commitment on our part. The American Board of Psychiatry and Neurology, which is a combined board, is something that with which I have always been involved. Recognizing that the psychiatrist needs to understand the organic component of what the brain does. From the standpoint of education, I feel that's my commitment to psychiatry as it relates to that.

R: We've talked briefly just about Suter and some of the early deans. Are there any other deans that stand out in your mind?

G: Yes, Al Stetson stands out. I thought he was very perceptive, very gentle, very honest, very hardworking. [A person] who put himself second and the goals of the institution and others first.

R: What sort of a relationship did you cultivate with the president and the other levels of administration?

G: I didn't have much to do with the president. I was on speaking terms with Bob Bryant, Steve O'Connell, and John Lombardi [president, University of Florida, 1990-1999].

R: Do you still have private patients or patients you see on a regular basis?

G: Yes, but that's still in the context in being involved in an outpatient clinic. In other words, patients who have been with me for thirty years. It's very interesting because sometimes a patient will come and say you treated me when I was a ten year-old. I want you to treat my granddaughter. We're dealing with generations.

R: It's nice to have those sorts of long-term relationships. How do you feel, in general, about the development of the medical profession?

G: A lot of it has been very positively disposed to my profession. I used the word fun at one time, but in reality we commonly deal with very serious problems and a physician needs to be committed. Through the commitment and satisfaction of dealing with a patient, this creates a joy in my soul, so to speak. There may not be an answer in this day and age, in terms of what medicine can provide a particular patient. You're there to ameliorate suffering and to provide solace. And to be able to answer whatever questions you can and that is soul satisfying for the person that does it. This is why you were put on earth. Recognize that you have something to offer and to give and that, in turn, will provide you a boost in your life. Keep you interested, keep you going, it's a constant issue of involvement, learning, giving, caring, participating in it. There are patients who need you. Whether it's a matter of patting them on the back or a matter of understanding that they have a dreadful problem, telling them in a way that's acceptable, that's the role of the doctor. Somebody's got to do it. This is a question which is asked--why are you in neurology? Why don't you go into obstetrics and deliver healthy babies and find a joy in doing that? Everybody's happy. Somebody's got to take care of the patient with the stroke or dementia. At least let the ailing patient know, this is what can be offered and I'm here to help you. That is soul satisfying. This is among the reasons, obviously, that there have been those who have pursued a career in part because of my involvement.

R: Is your impact on patients, obviously, but also on students, as important to you as anything else that you've done?

G: Yes, it's great thrill. If all I was interested in was patient care, it would be easier to accomplish that out in practice. The inconvenience of working in a big place like this with all the levels of administration that you have to go through to see a patient is often disturbing. To have an incompetent clerk replaced is impossible sometimes, whereas if I were in practice, this would be different.

R: How have technological developments advanced or retarded medical practice?

G: You use the word retarded and perhaps it has retarded, to an extent, my area of speciality. But when it come to diagnosis, this day and age, we have things like the CAT scan and MRI and perhaps the individual neurologist really doesn't have to think so much to understand the nature of the problem. Get the test, be done with it. You don't have to poke the patient with a needle or check a reflex. At the same time however, if the MRI's are normal or negative, you've got to think about what is really going on. Let's hope we haven't lost the talent to assess the patient. On one hand, these advances are terrific. They give great insight into diagnostic entities. So too are drugs, anti-convulsants drugs for Parkinson's disease. I described when the L-DOPA preparations came on-board. Those were major new dimensions for us in terms of our career goals in caring for patients.

R: The ability to interact with a patient is still the most important.

G: Yes, that's what one needs to do.

R: You still have to talk to them. Is there anything you want to add, to summarize?

G: Yes, I'm embarrassed by all this. I do not like having a light shined upon me. I [was] told when I was president of the American Academy of Neurology that I was unique as president. I let other people take the limelight, where I did all the work in the background. That, by and large, has been my approach. I think what I have done speaks for me. We had a hard time when they had a party for me, a retirement so-to-speak party. I was against it and I told my colleagues that the speeches were to be kept to five minutes total.

R: All of the speeches.

G: All of the speeches. Well, it didn't work out that way. It was an outpouring of affection. I was very pleased and embarrassed at the same time. I will tell you the story about my wife, who still feels that I have pursued the wrong career. She felt that I should have been a professional baseball player. Because I was good and it was in her mind's eye that she would be sitting behind the dugout and then when I became a manager she would have a better seat. Then when I became a co-owner of a baseball club, she would have a box that she would sit in. I have deprived her of that joy in life.

R: Did you ever at any point seriously consider going into baseball?

G: No, just her and her fantasies.

R: All right, I guess we'll end the interview with that. Thank you very much.

University of Florida
Samuel Proctor Oral History Program

College of Medicine
J. Hillis Miller Health Center Project

Interviewee: Dr. Melvin Greer
Interviewer: Nina Stoyan-Rosenzweig