

EUGENE AUSTON STEAD, Jr., MD: A Conversation With J. Willis Hurst, MD*

Dr. J. Willis Hurst was Professor and Chairman of the Department of Medicine at Emory University School of Medicine from 1957 to 1986. I was a junior medical student rotating through his service in 1957 when he was offered the chairmanship. He graciously discussed the challenges of the position with me at that time. He was my #1 mentor, and I have been a student of his now for 40 years. When Dr. Hurst was offered the chairmanship at Emory in 1957 he went to Durham, North Carolina, to discuss the position with Dr. Eugene Stead, then Chairman of Medicine at Duke University Medical Center, but who had previously been Chairman of Medicine and Dean of the medical school at Emory in Atlanta. Through the years, Drs. Hurst and Stead became good friends and their wives also got to know each quite well. Because Dr. Hurst knew Dr. Stead so well periodically, it was only logical that he be the one to interview Dr. Stead in depth.

It might also be of some interest that Dr. Stead was a student of my father, who was Professor of Medicine at Emory for 25 years. I have been told that my father was one of the strong supporters of Dr. Stead's returning to Emory from Boston and becoming the first permanent Chairman of Medicine at Emory.

William C. Roberts, MD, Editor

Eugene Stead, Jr., MD, probably influenced more physicians than anyone else during the last half of the twentieth century. He graduated from Emory University School of Medicine in 1932. After interning in medicine and surgery at the Peter Bent Brigham Hospital in Boston, he became chief resident in medicine at the University of Cincinnati. He then worked with the legendary Soma Weiss at the Thorndike Laboratory and the Brigham Hospital.

Stead became Emory University's first full-time Professor and Chairman of the Department of Medicine in 1942. In 1945 he was appointed Dean of Emory University School of Medicine but retained his position as chairman of the Department of Medicine. Not caring to be Dean, in 1946, he accepted an offer from Duke University to become Professor and Chairman of the Department of Medicine.

At both Emory and Duke, bright people flocked to him for training. He was different, colorful, charismatic, imaginative, creative, a problem solver, tough, a tireless worker, interested in how people learn, and an original thinker. He brought clinical science to the bedside in an unforgettable way. He insisted that a physician should understand a patient's disease, but emphasized that good doctoring required that the physician should also take care of the person with the disease.

His influence spread as he trained 33 or more departmental chairmen and untold numbers of divi-

sion directors. He became the most imaginative medical educator in the medical field. He started the first Physician's Assistants program in the nation at Duke University in 1964.

I became Emory's fourth full-time Professor and Chairman of the Department of Medicine in 1957 and remained in that position for the next 30 years. A day rarely passed that I did not think about and appreciate the legacy of excellence that was created by Gene Stead and the chairman who followed him, Paul Bee-son.

This conversation with Gene and Evelyn Stead took place on November 14–15, 1998, during a weekend visit my wife and I spent with the Steads at their home on Kerr Lake, North Carolina—a home they built with their own hands. Gene had just turned 90 years of age. As one reads the transcript of the conversation, it is easy to see that his creative juices are still intact.

The 4-hour conversation was tape recorded and then transcribed. The manuscript was edited and sent to Gene and Evelyn Stead for approval and corrections.

The conversation does not dwell on Stead's scientific knowledge but emphasizes his fascinating personal experiences and how he views the world. His colorful expressions and his honest views lead those who hear or read his words to realize that he and his partner, Evelyn, are national treasures.

J. Willis Hurst (Hereafter JWH)[†]: Gene, you were born in Decatur, Georgia, which is next door to Atlanta. The date was October 6, 1908. What was it like growing up in the South during your youth?

Eugene A. Stead, Jr. (Hereafter EAS, Jr.)[‡]: Well, of course, I didn't have any other frame of reference, I just grew up where I was. We were a family. I don't know exactly what my father's income

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was, but it was just enough to get along if we planned carefully. I can remember wanting a tennis racket that was going to cost \$1.50 and mother just broke down and cried and said, "Son, we just can't buy that tennis racket." We ate well. The family was structured well. I do not remember my mother and father quarrelling about anything. They obviously agreed before they talked to me and my brother and sisters, so they presented a unified front. They had perfect faith in what we told them. If the teachers told her that I did something bad, my mother asked, "What did you do, son?" I would tell her what I did. She would call the teacher and say "You are in error." I sometimes wish my parents had not had such perfect faith in me. I didn't tell lies very often, though. My father was a rather short man. He had boxed early in his life and he was absolutely fearless. I never saw any sign of fear. I was scared of everything—the dog, girls, and teachers. He had a nasty habit. He said, "I am short tempered, but I will never physically discipline a child at the time the incident occurs." So all of my whippings occurred on schedule. They were scheduled for the next day at 10 o'clock. I wished he had gone ahead when the incident occurred because I was mad, too, and I would not have minded a few strokes at that time. By the next morning I had just as soon not be whipped. Although I didn't have many whippings, they turned out to be effective discipline.

I grew up in a community that had no interest in learning or scholarship. I was always looked on as an unusual child because my acquaintances said I used words that were too long. They objected to that. I read books. I didn't have any particular athletic skill. All around, if you took football, baseball, tennis and swimming, I was probably better at that collection of things than most of my acquaintances, but in any one thing I certainly didn't excel.

I had only one very close friend who lived across the way and I could go back and forth to his house. I had a number of acquaintances, but essentially I grew up as a somewhat lonely child. I wasn't unhappy. But I never had any great companionships with other people. I loved the woods and I enjoyed my ability to navigate most of the woods around my part of the world. I always had a bottle of water or something tucked away in a little place so I could go collect it. So I had an ordinary childhood, not very remarkable, and I would have to say outside of family and my one friend across the way, I didn't really have any very close relationships.

JWH: How about brothers and sisters?

EAS, Jr.: I had a very close relationship with my brother, *Bill*. I was 10 years older than he was. At the time he was born, we moved into a different house. It had an upstairs in it. So for the first time we had a bedroom that was located away from the rest of the house. My brother and I lived in that bedroom until I went away for my internship. So we were very close. We never had any sibling rivalry. I never had a bicycle. My mother was dead set against it. That somehow frightened her to death. So, using the first money I ever made in the summertime I bought a bicycle for

Bill. I told mother, "You know you have had your way with one son. You are not going to have your way with the other." And so Bill got his bicycle. I taught him a number of things. I taught him to swim. We camped together. We talked together before we went to sleep. We have remained very close.

I was the first male in the family to go to college and I had no notion what a college was about and neither did my mother or father. I would sit down with Bill and go over what I thought I had missed in school and, because of that, he had a much better basic education than I did. He had one advantage over me. He became a good scientist. He still, at the age of 80, writes acceptable manuscripts, mostly related to tuberculosis. But I have always regretted that I didn't have the basic education he had.

JWH: What about your sisters?

EAS, Jr.: My older sister, *Emily*, played an important part in my life because, in the beginning, there was just the 2 of us. She was 2 years older than me. When she came home from school, we would play a game in which she was the teacher and I was the pupil. Decatur was just moving from a common schoolroom to a system of separate grades. When I went to grammar school, my sister Emily took me to the teacher and said, "He's going to be in the second grade." My sister said, "I have taught him how to read and everything that's in the first grade." The school was fairly unstructured in Decatur at that time, so the teacher placed me in the second grade. My sister saved me a whole year of school, for which I was later grateful. I obviously did other things with my sister. We played games. We read books. We ate at the same table. On the other hand, I think, with the exception of Emily's placing me in the second grade, we had surprisingly little in common. I have always been amazed at how few serious discussions we ever had about anything.

Emily and my other sisters, *Joyce Goodwin* and *Mary Clio*, were very competent people and did quite well in school. If you asked them if they liked their brother, they would say yes, and if you asked me if I liked my sisters, I would say yes. But I don't think we learned from each other, with the exception of Emily teaching me the first grade. I don't know why that happened.

JWH: Tell about your experiences in high school.

EAS, Jr.: During my senior year the principal of the school called 4 of us and said we will teach you a little bit of trigonometry and a little bit about advanced calculations. So once a week I would go down and spend a couple of hours in his office with 3 girls who also had been selected. So we had some advanced mathematics in addition to the courses in math that were taught in our high school. When I went to Emory University, they said we'll give you a test in math and see how much you have to take. I passed the test and I didn't have to take any more math. I have always regretted that.

JWH: Why did you decide to go to Emory University?

EAS, Jr.: I had a scholarship. Emory University was a young school and gave scholarships to the boys

in the neighboring high schools who had the best grade average. I didn't take any science at Emory College, except introductory chemistry and biology. I took biology because a friend of Emily's recommended that I take freshman biology. He pointed out that if I performed well in that I might be selected as the student instructor in biology and that was the best paying job for a student. I performed well and, because there were few biology students, I got the job. In addition, the Professor of Biology was sufficiently wealthy to double the small stipend I was paid by the college as a student instructor. As a result of that, my experience at Emory was very heavily loaded with biology, which in this day and age would be fine because it would have generalized physics and chemistry; but in my day, biology was purely descriptive, and since I had a pretty good memory, I did well. I made straight A's in all of the biology courses, but ended up with a very meager knowledge of physics, chemistry, and mathematics.

JWH: How did you afford to go to Emory College?

EAS, Jr.: Emory gave a scholarship to one boy in each high school within a certain radius of Emory College. Decatur, of course, was pretty close to Emory, and therefore, from the time I can remember, Emory gave Decatur High School one male scholarship. I got it.

JWH: Was Emory College easy for you?

EAS, Jr.: Whenever I wanted to learn, it was. I got involved in German, which I thought might be useful, but I discovered that you had to speak the language as well as read it. My Georgia tongue never got around to speaking it, so while I did extremely well on the written tests, it was obvious I was really wasting my time. I took one quarter of German and then dropped it. I didn't think it was profitable for me to take it any further. I would have made Phi Beta Kappa at Emory if it had existed at the time, because I had all those A's in biology. My Carnegie Library card was my best friend and I read a wide range of books. I did not feel deficient in the book learning, which was in the realm of literature. I was always interested in history and I loved historical novels. I had a fairly good knowledge of the Bible.

JWH: Your father was a pharmacist?

EAS, Jr.: My father was a self-made man. I guess he went through grammar school. He grew up during one of the depressions, which he called panics, and never got to go to high school. His older brother did go to pharmacy school. My father eventually worked in the daytime for his brother and read pharmacy in the evening. He passed the Georgia Pharmacy Board simply by studying in his brother's drugstore. In those days, people knew extraordinarily little about the heart, and when my father exerted himself, he developed considerable tachycardia. The physicians thought that was bad. For some reason, they advised him to give up his indoor job in the drugstore and get an outdoor job. He eventually became a traveling salesman and he loved to sell. He never made a lot of money. He sold things that didn't cost a lot of money,

but he actually enjoyed selling. He never understood why his son couldn't sell anything.

JWH: Gene, why did you decide to go to medical school and why did you choose Emory?

EAS, Jr.: I chose Emory for a very simple reason. I didn't have any money, so I applied to Emory. I was obviously already known on the campus, because I had done a few things that had gotten people's attention. I had not intended to go to medical school. In the middle of my third year in college, I decided I'd go to medical school. But it turned out that I had not taken any physics and had not taken anything beyond introductory chemistry. I discovered that I would have to schedule all of the courses in a few months. I was told that I could not schedule all of the courses that Emory required for entrance into medical school in the short period of time that was available before medical school began. I really didn't worry about this restriction. I just went to classes and took the examinations and got the grades. I then went to the powers that be and said, "If I don't go to medical school this year, I obviously can't go. I know you say a student can't take but so much work and cannot get but so many credits each quarter, but I have already done the work and have made the grades. All you have to do is bend a little bit and say—ok, you can go to medical school." The registrar relented and the medical school accepted me. The only question that was ever asked me when I applied for medical school was, "Son, can you get the money?" I had been around the campus long enough to belong to the biology society and other societies, so the college knew I wasn't flunking out, but I don't think anybody ever looked at my record. I said, "I think I may be able to borrow the money from the Rotary Club. I hear they have a loan program." (Just the other day I sent a check to the New York Life Insurance Company, paying the premium for a \$1,000 policy that the Rotary Club had required me to take out to cover my loan to go to medical school.)

JWH: Do you remember what the tuition was?

EAS, Jr.: It was not over \$500 a year.

JWH: What was your reason for going to medical school?

EAS, Jr.: I didn't go to medical school for the usual reasons that people say they go to medical school. I didn't really go to cure the sick or to save humanity, or to have a good social influence in the world. I went to medical school because of an argument. I used to play chess and I really was pretty good at it. But chess is time consuming. I discovered about the middle of my freshman year at Emory College that if I really played chess like I wanted to play chess, I clearly wasn't going to do anything else. It is a fascinating game. So I gave up my intense interest in chess, but I played an occasional game. I was playing chess with a man that you undoubtedly know, named *Robert Bayley*.^{*} He and several of his medical school colleagues told me how difficult medical school was. They said you really can't do anything else except just

*Robert Bayley later became internationally known for his work in electrocardiography.

go to school. There is no time for relaxation. You can't go to the picture show; you can't do anything. They said the reason for that is the tremendous detail that you have to learn in anatomy taught by a gentleman named "Butch" Blincoe. I laughed at them and said, "I can go to medical school and I can make A's in anatomy. I will go to class sometimes and stay home sometimes. I will certainly go to the picture show in the afternoon." So then they said, "You might be able to scrape through with C's and D's but you wouldn't ever make an A." The course was a memory course, and I thought that I had never seen a course that only required a good memory that I could not make an A in. At that time I could recite Poe's entire poem, *The Raven*. So in all honesty, I went to medical school to show I could make an A in anatomy. Also, that wasn't hard for me to do, because I always was a crammer. I thought a lot of the things I was supposed to learn weren't really very important and I didn't need to carry them in my head. If I looked at a course and decided the details were important, it wasn't too hard for me to memorize them. I never did anything until the last 3 or 4 days before the examinations. While it seemed to me that I forgot a lot using my system, it also seemed to me that other students who studied all the time, also forgot a lot in a short period of time. I have always stood up for the cramming system. Now it did mean 3 or 4 days without much sleep and a lot of coffee. But I discovered there was some advantage to looking at a whole course and deciding what it's all about. Then I would wonder what the professor was going to ask. I could usually guess what the professor was going to ask. The only serious trouble I ever had in the educational systems was when the professors wanted to penalize me too heavily for not going to class. I could read so much more rapidly than the professors could talk and, to a surprising degree, in those days medical school professors simply read to you out of a book and the students tried to write it down. I never liked that system, so when I became Chairman of the Department of Medicine at Emory and at Duke I never gave any lectures. I don't believe that's the best way to learn.

JWH: I agree with that. There is some story that the textbooks they used in medical school didn't suit you, so you got your own. Is that correct?

EAS, Jr.: There were 5 of us. We got our own books, which were more up to date.

JWH: I understand the Chairman of Anatomy, Dr. Blincoe, lived up to his reputation of flunking a large number of students?

EAS, Jr.: This is what happened. During the middle of our freshman year, there was a great rebellion against Dr. Blincoe because the medical school people said that Emory is getting a bad reputation because Blincoe flunked too many of his students in anatomy. In addition, the chairmen of the departments of chemistry and physiology were upset because Dr. Blincoe, by his threats, prevented the students from studying anything but anatomy. Actually, some students were not dropped from medical school because they went

somewhere else during the summer and took their anatomy over. They made all A's at some other medical school and then came back to Emory and most of them eventually got through medical school. I don't know who all was involved in the revolt, but Dr. Blincoe was required to offer 2 courses in anatomy. One was an easy course and the other one was tough, as it had always been. Because I had no problem memorizing, I and a few others, took the tough course.

Five of us got our own textbooks and that had a lifelong effect on me and my future students. Later, I never gave a student an assignment. I discovered when I got to the Brigham as an intern that I was deficient in science but ahead in clinical knowledge. I was way ahead of the other interns. At that time there really wasn't much relationship between science and clinical work anyway, and I had worked at Grady Hospital where I had seen a lot of sick people. I was far better read than any of the Harvard students or students from other schools. Later, when I became Chairman of the Departments of Medicine at Emory and Duke, I did not give assignments to students. I would say, "You know this is an area that happens to interest me. I am going to be looking into it the next few weeks and, if you want to look into it, we can talk about it."

JWH: Do you think that approach to teaching started back in Emory College when you were a student instructor?

EAS, Jr.: I think so. I always enjoyed the business of interacting with people in a learning situation. I don't know why that happened. Maybe it had to do with the fact I couldn't tell lies at home. I never did have too much trouble in saying "I don't know." It is a great virtue to be able to say "I don't know" and not be embarrassed by it. I was protected in part by an extraordinarily good memory. I have never known exactly what makes somebody have a good memory. I think it is the ability to order things so that they relate to each other. Anyway, the facts were never difficult for me to get into my head. Moving the facts around, I thought, was kind of fun. I did that from the time when I was a student instructor at Emory.

JWH: When you went to Emory Medical School, the clinical work was practically all at Grady Memorial Hospital, was it not?

EAS, Jr.: Yes, the first and second years were nearly entirely on the Emory campus and the last 2 years were at Grady Hospital. We had a few clinical lectures on the campus. I remember only 1 of the lecturers. He was *Stewart Roberts*,[†] and while I didn't think that was the best way to learn, I thought listening to Stewart Roberts was really fun. And the lecture I remember most was on pellagra. He had made a detailed study of that. I have never forgotten that particular lecture.

JWH: They called Roberts the "Osler of the South."

EAS, Jr.: The substance of his orations was always very well organized. Roberts not only had it in

[†]Dr. Stewart Roberts was the father of Dr. William C. Roberts, who is the Editor-in-Chief of this Journal.

good form if you read it, but his presentation added to what one could get from reading. There aren't many lecturers who can do that. I never regretted the hour I spent listening to Stewart Roberts talk about pellagra.

JWH: Tell us about *Dr. James Edgar Paullin* and his relationship to you and his influence on you.

EAS, Jr.: When we were young, my sister Emily and I had severe bronchial pneumonia, bilateral ear infection, high fever, and chills, and the local doctors were pessimistic as to whether we were going to live. My mother always read the *Atlanta Constitution* and its section on public health. She knew the name of the director of the Georgia Public Health Service Laboratory, because in the *Constitution* there was a report on how many bacteria there were in the various dairies around the city. Through this reading, my mother became aware that Paullin was the person who knew something about laboratory science. At the time we were sick, Paullin had entered practice. The other thing she knew was that he was a Hopkins graduate and she knew that Hopkins was probably the best medical school in the country. He took care of my sister and me, and we obviously made a recovery. I can remember only 2 things about the treatment. When the temperature reached a certain stage, we were dipped in ice water. That's not very pleasant when you are young, and so it was accompanied by a fair amount of screaming. The other was the question of how to take care of our ears. I don't know if what they did actually did any good or not, but it made me aware that the ears could certainly hurt. With time Dr. Paullin became a specialized internist and did no family practice, but he never could get rid of my mother. So he was our family physician from that time on, whether he wanted to be or not. He had an air about him that made you think he knew what he was doing. I don't know how you do that, but I never had any feeling other than there's a man with tremendous ability and confidence. I never saw him in his early years without a cigarette, which later puzzled me a bit. When I got down to Grady Hospital my junior year in medical school, I discovered Dr. Paullin came down to Grady 2 days a week religiously. He came down on Tuesday morning at 9 o'clock and he saw 1 or 2 patients in which he took a history himself, performed a complete physical examination, and looked at the laboratory data. He then discussed the patient's problems with the residents. That was the time I was supposed to be at lectures. Because I didn't think too much of the lecture method, I didn't feel I missed anything, so I always joined Dr. Paullin when he was in the hospital. He always had 1 person tagging along and that was me. I read a lot. So when he questioned the residents, I could give the answers. Because of that, I was an objectionable kind of student. Dr. Paullin gave the Clinical Pathological Conference on Wednesday at noontime and I never really knew him to miss the diagnosis. I remember the first time I ever heard of urea clearance was in a discussion by Dr. Paullin. It was the first time I ever heard of *Van Slyke*. He kept up. He was the first person to describe recurrent typhus in this country. He had followed 100

patients with hypertension and published a paper describing his initial findings and their subsequent course. He kept good records and was clinically alert. He knew clinical science and how to apply it to patients far more than anyone else at Emory. He was unique in my experience.

JWH: Were you influenced by other physicians?

EAS, Jr.:[‡] My first attending man on the ward at Grady Hospital was *Dr. Hugh Wood*, who later became Dean at Emory. I had a patient who was 70 years old with atrial fibrillation, soft skin, sweating, weight loss, and diarrhea. When I did his white count, I was amazed to see how many lymphocytes he had in the differential count, but I couldn't put it all together. I asked a friend of mine for help. He was the smartest student in the class, and clearly smarter than me. He rode the streetcar with me to Grady Hospital and I told him about my problem and said, "I don't know what to do with all those lymphocytes." He scratched his head and said, "People with increased function of the thyroid gland have a lot of lymphocytes." Dr. Wood came in and took a look at the patient. He put it all together. He was just as nice as he could be about my ignorance. Then there was *Dr. Carter Smith* who was taking electrocardiograms on all types of patients. He was trying to learn more about the electrocardiogram. He was a good looking young man. He was just the picture of what a young doctor should be. I was impressed, I knew I would never look like that, but I decided I better go find out where he learned his medicine. It turned out he had been to the Brigham Hospital in Boston.

JWH: Why did you choose the Brigham for internship?

EAS, Jr.: I went to Hugh Wood and said I was thinking about internships. I said, "I have 2 models that appeal to me, one is you, and the other is Carter Smith, who trained at the Brigham. I would like to know where you did your training?" He responded that he too had interned at the Brigham. He added, "Dr. Paullin knows the Chief at the Brigham, whose name is *Henry Christian*. Since you know Paullin, an internship at the Brigham ought not to be too difficult to arrange."

JWH: Paullin went to Hopkins?

EAS, Jr.: Paullin went to Hopkins.

JWH: But he knew Christian.

EAS, Jr.: He knew Henry Christian. Paullin was always important in whatever organization he belonged to. He was a superb medical politician. Politicians make people get together and do things they wouldn't do otherwise. In that sense he had some genius about him. In addition, he could tell those wonderful southern stories. He, *Hugh Morgan*, and that whole group of people were good raconteurs and the people just liked to be with them.

JWH: So the 3 of them—Smith, Wood, and Paullin—influenced your decision to go to the Brigham.

[‡]Note in the following paragraphs how Dr. Stead recalls the details of patients he saw as a medical student almost 70 years ago. This fact supports the notion that excellent doctors learn most from their patients.

EAS, Jr.: Yes. I had only one problem. Just before I planned to go take the examination for internship at the Brigham, the Professor of Urology at Emory called me down and said, "You've got a D in urology." So I went to one of the high administrators and said, "I don't know what to do. My family doesn't have much money and I don't want to go take these examinations for internship in Boston and New York and discover that I have been administratively ruled out on account of a D in urology." The administrator said, "Did you take the examination?" I said, "Yes." He said, "What grade did you make?" I said, "I got an A. But the professor said since I hadn't attended his lectures, the fact that I made an A didn't count." The administrator said "Don't worry about it. I don't want to go argue with the guy, but we'll just kind of forget the issue of urology. Your transcript will list no grade in urology."

JWH: That's a great story. You made an A on the exam but never went to his lectures?

EAS, Jr.: The lecture just came out of the book. The professor never had an original thought. I went to the first couple of lectures, but I never went back.

JWH: Who interviewed you at the Brigham?

EAS, Jr.: I had a great time. I went to the Brigham in March 1932 to take the examination for internship. I had discovered a book by *Paul White* on heart disease, which was published in 1931 and thought, well I haven't finished reading it, so I'll just take it with me. I went by train because I could read on the train. The buses were pretty hard to read on at that time. One of the things I read about was coarctation of the aorta. It took me a long time, with my Georgia tongue, to say coarctation. So the first interview was with *Sam Levine*, who I always loved. He got around to asking about coarctation. He had a patient with coarctation in the hospital and, of course, I was full of coarctation and spent the time of the interview talking about it. I was then interviewed by *O'Hare* who was a good clinician. He was the man with an ophthalmoscope who looked at the retinae. I also was interviewed by *Henry Christian*, but I don't remember what we discussed.

I took all of the Boston examinations. I never knew what I did at the Massachusetts General Hospital. We had both a written and an oral exam. The written examination paired down the groups of people, so I know I passed that piece of the exam. Since I put the Brigham as my first choice in July, I don't know how the General ranked me. Then I went down to the Boston City Hospital and saw *Soma Weiss*, whose name I didn't really know. I also saw *Bill Castle*, whose name I did know, who said, "Look, it is late in the afternoon, and we are kind of tired, why don't we have a cup of tea?" I don't remember any of the questions they asked me, and since I didn't list the Boston City Hospital as my first choice, I never knew where I stood with them. I will tell you about one other interview I had just to show you how simple-minded one can be when he or she is young. I had decided not to apply to any of the New York hospitals, but I had an acquaintance who was going to apply to

the New York hospitals. He said "Why don't you fill out the application to some of the New York hospitals. I am going up there. Why don't you apply." So, I applied to Presbyterian Hospital. The first patient I had on the practical examination was a young lady with rheumatic fever who knew a lot more about rheumatic fever than I did, and obviously wasn't supposed to tell me anything. But, as you know, if you are quiet and let people talk, they will tell you quite a lot of things. So I did. I had already passed the written examination and I was now in the final stages of the examination. So, I really did quite well on rheumatic fever with a little help from the young lady. I got to the final stages of the selection process. We were down to where there were about 4 of us who were going to be eliminated. I got in the interview room where *Dr. Palmer*, an imposing man, was sitting at the head of the table. *Drs. Robert Loeb* and *Dana Atchley* also were there. There weren't many married interns at the time, and so the first question Dr. Palmer asked me was how long I had been married. And I said, "I am not married. I have always been kind of afraid of girls in spite of having 3 sisters. I don't have any plans to be married." He said, "Well, why did you check the place on this application blank stating that you are married?" I said, "I have no memory of that at all." Obviously, it was a stupid thing to say. He responded, "Well, if you don't even know whether you are married or not, I don't think that you would do well at Presbyterian Hospital." That was the end of my interview. So it is a good thing I read about coarctation and had a good interview with *Sam Levine* at the Brigham. The written cut the number of applicants for internship down by at least 50%. The survivors took the oral examination. They had far more applicants than they could take as interns.

JWH: How did the married box on the application form get checked? Do you remember?

EAS, Jr.: I was in the process of filling out the application when the error occurred. I lived at home, which was two and one-half miles from Emory, and one of my friends called and said, "I've got a car and I am going to Emory. I'll pick you up." So, he was outside blowing the horn and I was inside rushing to fill out the application. That's how it happened. It was a stupid error. Later, thinking sensibly, because New York was on my way from Boston to Atlanta, I frequently went by Presbyterian Hospital. I always arranged to be there at a time when *Dana Atchley* was making rounds. He was a great humanist. I would also see *Bob Loeb* either on the ward or in his office and say, "Here I am again. This is what I am doing."

JWH: Tell me about the internship at the Brigham.

EAS, Jr.: The Brigham internships were set up on a 16-month basis. In medicine, the 16 months was divided into 4-month sections. I started in June because I thought that would be the most competitive position. I was very ignorant about what was happening in the real world, and I didn't appreciate that an intern would have time left over at the end and, for that reason, Harvard graduates chose to take the summer off before starting the internship. I discovered I

had actually applied for the least competitive slot. I thought I was applying for the most competitive spot and I was so pleased with myself when I got a June appointment. But when you don't have much money you are always in more of a hurry than are the people who have money. Dr. Christian didn't believe in vacations, but he said a lot of the people did believe in them and he was willing to compromise. So, I got a letter from him saying if I could appear at the Brigham on the 15th of June to begin my July appointment, that I could have 2 weeks vacation in mid year. He wrote if I did not wish to appear until July 1, there would be no vacation in mid year. I did that with the house staff at Emory when I was chairman there. It is not a bad system. I was just as rigid as Dr. Christian. If interns didn't come the 15th of June, they stayed until the last day of their internship. They had no vacation.

JWH: Who were the physicians at the Brigham that influenced you the most?

EAS, Jr.: Sam Levine was the one who influenced me the most. First of all, I had thoroughly enjoyed the interview when we discussed coarctation of the aorta. I discovered that he gave a practical course in cardiology. He gave a lecture twice a week followed by a couple of hours on the ward. Most of the time I managed to get to the lectures, but I could live without those because that's not the best way to learn. I always went to the ward sessions. He was a great doctor in every sense of the word. I was always pleased that I was smart enough to become his pupil and eventually his friend.

I already knew more clinical medicine than the other house officers. This is because Grady Hospital was a great place to see sick people. I had already seen more sick people by the time I got to the Brigham than I saw during my entire stay at the Brigham. Remember that as a student I attached myself to James Edgar Paullin. In addition, I took my Christmas vacation as a substitute intern at Grady Hospital. The thing that troubled me most was I had to cover the pediatric wards at night. I never was sure that the pediatric wards got the best coverage during those 2 weeks of Christmas holidays. I did my first pericardial tap during Christmas vacation at Grady Hospital.

Sam Levine was in the hospital every day in the electrocardiographic laboratory. He saw his private patients who were in the hospital, but in the year that I interned he was not a regular attending man. He gave his cardiology course and saw a few patients twice a week, but he was not a scheduled attendant. We had 2 attending men to each ward. The physician I got the most out of was *Joe Aub*. I had never met a man like Aub. I didn't know any physician who knew as much science as he knew. I felt the same about Henry Christian. Most people were afraid of Henry Christian. But he was always very fair to me, and I always enjoyed making rounds with him. He came from a background in pathology and that was what he was interested in. He wanted to identify the pathology that would be found at the autopsy table. The experiences the patient might have had that couldn't be shown at the autopsy table were of no interest to him. I can

remember the time he missed an aortic diastolic murmur that I had picked up because of my Grady Hospital experience. And I called him up and said, "I would like for you to come see the patient with me. I think I have a finding that was overlooked." He came down to the ward just as gracious as he could be and listened again to the patient. He agreed with my finding and said, "I just didn't have a good day. I have no argument, that's a diastolic murmur I should have identified." Eventually, to my surprise, he offered me the chief residency at the Brigham Hospital. I turned it down, because by then I was already working with Soma Weiss and did not want to leave him. I was kind of pleased, however, that Dr. Christian remembered me over those years.

JWH: Tell me more about your 16-month medical internship.

EAS, Jr.: We went through a graded experience. The first 4 months we worked entirely in the laboratory. We had no required clinical contact. We analyzed blood and urine samples. We analyzed the blood for sugar and urea. We did the lab work, including urine and blood cultures.

JWH: So the first 4 months you did research in the lab.

EAS, Jr.: No, we didn't do research. We just did what the clinicians who were working on the medical service ordered. Every patient had to have a complete urine examination and a complete blood count once a week. A lot of routine was built into the system. But it took me a long time to analyze the blood for sugar and urea. I am not a skilled laboratory worker. I am clumsy.

JWH: Experience as a medical intern would be somewhat different every 4 months?

EAS, Jr.: Yes. The second 4 months we did the initial patient workup along with a student. We began to have clinical responsibility the third quarter, when we were actually in charge of the ward. They really didn't have an assistant resident above the intern. The patients were our patients. During the first 4 months the intern was called a "pup." During the next 4 months, the trainee was called a junior resident. During the next 4 months, the trainee was called a senior resident.

JWH: What did you do during the last 4 months of your internship?

EAS, Jr.: During the last 4 months, I worked in the outpatient clinic and I was on call every other night. I had one night that I really had no responsibility.

JWH: Didn't you take an internship in surgery?

EAS, Jr.: I finished my internship in medicine at the Brigham the end of September. Most appointments began in July. So I spent the following 9 months in Dr. Christian's laboratory. It was his laboratory in name only, because I never saw him appear in the laboratory. I worked with a group of people who were trying to discover how mecurial diuretics worked. Did the diuretic bring in fluid from the periphery by some undefined mechanism, and, when the blood was sufficiently diluted, cause a diuresis to occur or did the drug act directly on the kidneys,

preventing the reabsorption of glomerular filtrate? It seemed to me that it was simpler to believe the drug acted directly on the kidney. But there was quite a disagreement at the time. So we went to the dog lab. We made some dogs edematous and gave them mercupurin and observed the course of events. It became clear that the system worked because the kidneys were taking the fluid out of the blood and so the blood became concentrated. It was obviously amateur science, now that I think about it, but I did discover one thing that was important. I did learn to be pretty good at performing needle punctures of the femoral arteries of the dogs. Initially, our experiment did not work. We got the dogs' serum proteins down low but they never developed edema. We were about ready to fold up and think up something else to do, but I was around the laboratory late one night and went by to see my dogs. There was a light there and I found the deaner who had cared for the laboratory animals for many years. I said, "You know we are trying to make our dogs swell up by loading them with water." He said, "About 10 years ago, we had a group that worked here. They took out some blood and spun it down. They put the blood cells back in and kept the liquid stuff out. Their dogs got a massive amount of edema." I said, "We have done that to our dogs and have produced a very low serum protein, but they don't have edema." He said, "Well they did one other thing that you people are not doing. They came in about 10 o'clock with a big bottle of salty water and put a stomach tube down their dogs. They gave the salty water to the dogs and they really swelled up." I said, "How stupid can one be." We gave salt water to our dogs and they swelled up. They got massive edema. I was the man who measured the serum proteins. I did total nitrogens on the blood to determine whether total protein concentrations was going up or down. My colleagues were kind of irritated with me because I was never a very quick laboratory worker. This was about all I could do.

JWH: This started your long-term interest in edema?

EAS, Jr.: I guess the reason we always worked on edema was simple. I later watched Dr. Castle waiting for an untreated patient with pernicious anemia to come in. You can wait quite a while for some things. But if you were interested in edema, you always had patients to study. You never had to wait to find a patient. So our interest in edema came from the availability of patients. I discovered that we didn't have to be too smart, but when we studied someone in the hospital, and spent a morning with him, we had to learn something. We might not have learned what we set out to learn, but we always knew something at the end of the day that we didn't know when the day started. So from the time I became clinically involved trying to make my way in the research world, we measured something on some patient every day. We worked on Christmas Eve. We never stopped. We never knew we were working because nobody was driving us.

JWH: Why did you decide to become a surgical intern?

EAS, Jr.: I had a great time as a medical intern. I didn't have any money. I didn't smoke and I didn't drink. Although I had 3 sisters, I was really very bashful around women. I didn't go to picture shows because I didn't have the price of admission. So I lived in the Brigham Hospital. And I discovered when everybody else went home, I was the chief doctor. I kind of liked that. And so when I got through with the medical internship, I had to decide what I would do next. The jobs I could have done would give me less patient contact than I had as an intern. And I thought I just had too much fun taking care of patients. I reasoned that there was another population of patients that I didn't know much about that were admitted and taken care of by surgeons. I also thought about repeating my medical internship. The title didn't mean much to me because by 6 o'clock, I was the main doctor. There was nobody there but me. So I told my family I was going to repeat the medical internship. So they said, "Now look, Gene, we don't have very much money. You don't have any. All of your colleagues are already out in practice." This was at the end of my 2 years, because I also had 9 months experience in Christian's laboratory. My folks said, "You are supposed to have reasonable intelligence and now you tell us you are going to repeat what you have just finished." So, for the first time ever my mother and father were very positive about the fact that I wasn't very bright. They said, "That is the most ridiculous thing we have ever heard of." So I decided to be a surgical intern. Now it became perfectly clear very early, which I guess I must have known before I took the internship, that I do not have the hand, eye, or brain coordination to make me a very skilled surgeon. I am clumsy. If I walk through a door I hit one side. I can't go through the middle. I was a popular surgical intern because I did what I was required to do. I had to do a certain number of surgical procedures to get my surgical certificate. I did those and did them to the best of my ability. But if it was a question whether my running mate should do the surgery or if I should do it, I said he should do it. I said to him, "It's your career and I am just having a good time." So by the time I had finished my first quarter, in which I was actually making holes in people and sewing them up, clamping arteries, and what not, I knew I was going to be an average surgeon and would never be a surgeon of distinction.

JWH: What did you do after your surgical internship?

EAS, Jr.: I didn't know what I was going to do when I got through my surgical internship, because I had finished at the end of September. Jobs that started in October were not available. I had from September until the next July to fill in with something. So I went back to Christian's laboratory. This time I worked with *Jack Gibson*, who was a very interesting person. We did work out a lot of the wrinkles that made it practical to measure the plasma volume. My first publications were with Jack. The knowledge I gained reading Van Slyke's book enabled me to solve some crucial technical problems.

JWH: Did you see Dr. Christian?

EAS, Jr.: In the lab? No. I had an interesting experience with Dr. Christian. He was supposed to pay me \$1,200 a year. When I got my first monthly check, I realized it was figured out on the basis of my getting \$900 a year instead of \$1,200 a year. So I went to him and said, "Dr. Christian, I regret to tell you that there has been a misunderstanding about my income." I said, "You were supposed to pay me at the rate of \$100 a month, but you cut me down. I simply can't survive on that amount of money." And he said, "Well, did either one of us put anything in writing?" I said, "No, you didn't, and I didn't ask you for it." He said, "Well, while I think you are wrong, I think you have a greater interest in being right about this than I have." He said, "While \$300 means something to us because money is very tight, it must mean more to you. I'll take your word for it." Christian called his secretary and asked her to make up the difference. I kind of liked that in the old gentleman. I am certain I was right and he was willing to take my word for it.

JWH: Why did you go to Cincinnati?

EAS, Jr.: First, I knew something about Cincinnati. The person who had the highest marks in the Emory Medical School class always went to the University of Cincinnati. I was probably second or third in my class. The University of Cincinnati took no other Emory student. So my only knowledge of it was that it must be a reasonably good internship, because the top man in my class went there. Now, more to the point, I was in the dog lab for 9 months. One day, having been working with the dogs all night, at 7 A.M. I decided to go by the Brigham and get a shower and at least be clean when I went to breakfast. While showering, I realized there was a man in the shower next to mine. He turned out to be a tall man and he put his head over the top and said, "I'm Tom Spies from Cincinnati. My chief, Dr. Blankenhorn, has sent me to Boston to find his next year's chief resident." I said, "That is kind of interesting." After dressing we sat around and talked a while, and he said, "Why don't you come to Cincinnati?" And I said, "Well, for one simple reason, I don't have bus fare to go to Cincinnati." By that time we were down in the dining room sitting with Hartwell Harrison, who had taken a medical internship at Western Reserve and knew Spies. Spies said to Harrison, "This is the man we would like to come to Cincinnati, but he doesn't have the bus fare." Hartwell said, "I have a rich uncle who helps in these kinds of things. Let's find out what it is going to cost and I'll take it to my uncle." (I suspect it was Hartwell's own money rather than the money of a rich uncle.) I didn't have anything else I wanted to do. I knew I was not a laboratory worker. I had done a few things, but they had to do with thinking and not with how you manipulated the pipettes. Also, I had not had, and I never had, any formal research training. Dr. Christian just said, "There is the research laboratory. If you want to spend some time there, go spend it." But, as I said earlier, I never saw Dr. Christian put his head in the laboratory. So we were clearly on our own, and this is when I ran into the Van Slyke books. I

don't know where I got the money, but I bought the books. I guess I got second-hand books. But it didn't take me long to figure out that I would never be a skilled laboratory worker. I could get some young lady to do it a hell of a lot better than I could. So I was looking for clinical activities. And Spies said, "You come to Cincinnati and we'll put you on the busiest ward in the hospital. That is the white male ward, and you will have a heavy clinical load. You will be responsible for 2 interns and a few students, and at the end of the year you will be our chief resident." Now one of the things I didn't think about was that Cincinnati had a very elaborate residency system in which the house officer usually had 5 years of medicine before he became chief resident. I did go to Cincinnati and worked on a very busy clinical service. I didn't see much of Cincinnati, but I saw a lot of sick people. Many very sick patients were in the autopsy room a few days after they arrived, and I was in the autopsy room along with them. It was a tremendous learning experience.

JWH: You then became chief resident in medicine?

EAS, Jr.: Yes, I became chief resident.

JWH: Was that the first time you felt the responsibility of leadership?

EAS, Jr.: From the time I first started tutoring people in undergraduate school at Emory I was called "professor." I was also called "professor" during my internship.

JWH: During your undergraduate days at Emory, you were a tutor in biology. Was that when you discovered that you liked the intellectual encounters which led other people to think in different and broader terms?

EAS, Jr.: I liked it. There wasn't any doubt about it. I liked it.

JWH: At Cincinnati I gather you had a chance to really test your teaching and leadership abilities.

EAS, Jr.: That's right. Dr. Blankenhorn was only in the hospital for 4 hours a day at the most. The rest of the time I was the chief and I made no bones about it. No patient was transferred to or from the medical service that I didn't see. The service belonged to me and there was no argument about it. There were certain other things that I could do if I was mean enough. I discovered that rotating internships were in many ways better than straight internships. One trouble with a rotating internship was that the appointments to be junior resident on other services were usually made in January. From that day on the rotating intern didn't care what happened on the medical service. Now I was aware of that and had the opportunity to see the Cincinnati students that were going to become rotating interns during the time I was chief resident. I knew who was going to work and who was not going to work. So, I went to those that I thought would not work and said, "To get credit for your year of internship, you've got to have my name on a piece of paper. My advice to you would be to swap off some time with those who are planning to continue in a medical residency. I'll give you a list of people who will swap some time with you. Then you won't have to have my

name on a piece of paper, because you did not serve under me. I advise you to think it over." So the poor workers swapped time with the good workers and I ended up with a superb group of interns.

JWH: So the chief resident had a powerful hand in selecting the next group.

EAS, Jr.: I had a powerful hand, but the students had to make the selection. At least they had the information that enabled them to make the right selection. I ran the thing with an iron hand. I don't point this out with any particular pride. I am just recounting exactly what happened. I was in the hospital 24 hours a day.

JWH: You met Soma Weiss when you were at the Cincinnati General Hospital. How did that happen?

EAS, Jr.: *Dr. Eugene Ferris* was on the staff at the University of Cincinnati. He had worked with Soma Weiss in Boston. He invited Soma to visit the Cincinnati General Hospital. Soma Weiss came and spent 6 working days at the University of Cincinnati, and I was his host.

JWH: That's the way visiting professors worked back then?

EAS, Jr.: Yes, and Soma couldn't get rid of me. I stuck with him.

JWH: Today, the visiting professors come 1 day and leave the next day, and may not make ward rounds with the students and house staff. They usually give a lecture.

EAS, Jr.: Right.

JWH: Tell me about some of the things that happened between you and Soma Weiss.

EAS, Jr.: I can remember I said to him, "There is something that interests me and I don't know the answer to it. We have patients who come in here with atrial fibrillation. Obviously, there is a lot of rheumatic heart disease around and atrial fibrillation is one of the things that occurs in patients with rheumatic heart disease. But many times I can't hear the usual diagnostic rumble of mitral stenosis. These patients all have a third sound that is frequently louder than the second sound. And at autopsy they all have mitral stenosis." I can't remember whether Soma knew that or not.

JWH: You discovered the opening snap of mitral stenosis?

EAS, Jr.: I discovered the opening snap and I didn't know what to do with it.

JWH: You and Dr. Weiss obviously had a good time together. Did he offer you a position or did you ask him for one?

EAS, Jr.: I can't honestly recall. At the end of his visit he said, "We have had a good time together. We've seen a lot of sick people and we have thought about a lot of things. Why don't you come and work at the Thorndike for a couple of years. I can pay you \$1,200 a year." I said, "I've got problems. My brother is in medical school at Emory and I am paying part of his tuition. I also have to finish paying off the Rotary Club in Atlanta for the money I borrowed to go to medical school. I must have \$1,800." He said, "We've never paid anybody that much money and I don't have

any way to get more than \$1,200." I said, "Let's not worry about it. I don't know anybody else I want to work with. At the end of July I plan to take a month's vacation. I have forgotten what vacations are like. I think I would like to try one out before I go into practice in Atlanta. If you find 600 more dollars to add to the \$1,200, give me a call before July and I will appear in Boston by the first of July. We have had a great time together here and I hope you find the money." His visit to Cincinnati was in February and toward the last of April I got a wire that said "I have 600 more dollars."

JWH: So you joined Soma Weiss at the Thorndike Laboratory at the Boston City Hospital?

EAS, Jr.: Yes. When I got to the Thorndike, I played squash on the 30th of June with a young man who was to be a co-fellow with me. He was much bigger than me and a much better squash player. He accidentally hit me right across the side of my head with his squash rack. I still have a scar from the blow. A future professor of neurosurgery sewed me up. I always said to him that he wasn't a very good neurosurgeon because of the scar he left. He said, "How the scalp looked wasn't important, it was how the brain looks." I went to see *Dr. Minot*, who was the chief of the medical service, the next day with my face bandaged up. I think one of the more interesting things about it was that Dr. Minot thought that residents were supposed to be kind of bruised up and he didn't pay any attention to my swollen face and bandage. Dr. Minot said, "Dr. Weiss is in Europe. He'll be gone 3 months." I said, "I'm supposed to be doing research and I don't know how to do research." He said, "Don't worry about it. Why don't you just take 3 months off and look around Boston." I said, "I have already spent 2 years in Boston and I am too old to be spending 3 months looking around Boston." Well, he said, "Do what you want to do," and he went about his business. He was a very interesting man. Each weekday I sat outside the bathroom and carried on a conversation with him while he used the facility. He taught me one thing that I felt was valuable to me. I couldn't figure out what he did that made any difference. I honestly couldn't. But every now and then he would be gone for a couple of weeks. It became obvious—the Thorndike Institution, by some magic, always did better when he was there than when he was gone. So he did something, but I didn't know what it was. Whatever it was—it made a difference.

JWH: Didn't you have 2 jobs, one with Soma Weiss and one as chief resident?

EAS, Jr.: Yes, that's how Soma got the \$1,800. I was chief resident in medicine and worked in the Thorndike. The Boston City Hospital was an interesting place because an Irish politician ran the hospital. He thought he was supposed to show that the hospital was the most economically run hospital in the country. So he said, "No lights should be burning after 10 o'clock at night." When I was a student instructor at Emory my chief job was to turn off the lights at night. I got good at it. So, when I turned up at the Thorndike 7 years later, I started turning off the lights.

JWH: Tell me about Soma Weiss and how he influenced you.

EAS, Jr.: There has never been a good biography written about him and that is a real problem. *Jim Warren* and I have written a number of short pieces about Soma Weiss. He was a man who made you want to do things. He obviously did things himself. If you look at what 1 man can accomplish and then look at what 20 men can accomplish, it's pretty difficult for 1 man to accomplish more than 20 men can accomplish. If you look at Soma's total output, it is us! The individuals he trained. He had an advertising system that was better than anybody else's in the country. At 7 o'clock on Tuesday evening he went to the top of the big clinical tower that housed most of the medical patients at Boston City Hospital. The top floor housed the in-patient neurology service. Soma was always interested in neurology. He saw the neurology patients that were undiagnosed. He then went from floor to floor seeing patients. The Boston City Hospital had a number of services—Tufts, Boston University, the town doctors, and Harvard had 2 services. Soma didn't worry which service it was. He went through all the services on all the medical floors. At the bottom of that building was another little building called the Peabody. It just had 2 floors of patients in it. He ended up the night at the bottom floor of the Peabody. They were really great teaching sessions. Soma had the ability to analyze a patient's problem very quickly. He read the world's literature. Most of us read the American literature, but he was fluent in German and could read French. And he read quickly. This was a great advantage. So he had this wide range of knowledge. He had spent time in pharmacology right after his internship, so he was interested in drugs and what they would do. He was very interested in how sick patients felt. He rapidly stated what was known about the pathology of a patient's disease and he would then say, "Now let's look at the experience the patient has had with the disease." He wanted to find out how the disease affected the patient during life. So he was the first person I ran into who was really interested in getting an account of how the patient really felt. His approach to medicine was to know the pathology, but dispense with it quickly and then look at how the disease affected the patient. This was a new approach for me. I began doing that and that is why I became such a popular "rounder" early in my life. I picked that up rapidly from Soma.

JWH: Did he ask a lot of questions during rounds?

EAS, Jr.: Soma did what I have always done. He said if you are going to make rounds with me and you don't know what is in the textbook, you are wasting your time, because I'm not going to tell you that. You can read that. He just made the assumption you knew what was in the book. I never heard him give a lecture on a disease. He knew the most common things that patients tell you, but he went beyond that. He always tried to identify what was beyond the textbooks and he was very good at it. I would say he listened more than he talked.

JWH: Was he the best teacher you ever knew?

EAS, Jr.: I certainly learned the most from him. I would have to say that the best teacher will never be the same person for all people. I already had a pretty broad knowledge of clinical medicine, but I had absolutely no knowledge of science except out of a textbook. I knew the pathogenesis of diseases that was recorded there, but I did not have the slightest notion how to go beyond that. He helped me do that. Well, he also did another thing that I have always done. Ward rounds should be an intellectual quest. I have always said that I don't deserve any credit for a trainee saying that he or she had a great morning on ward rounds. The only way I am going to judge the success of ward rounds is if the trainee does something after ward rounds that he or she wouldn't have done if he or she had not been on ward rounds. It seems to me the mark of a great mentor is to open up things that wouldn't be opened up if the trainee hadn't been with the mentor. Of course, the trainee has to be interested enough to be present.

JWH: Soma Weiss then moved to the Brigham Hospital as chief of medicine and you moved with him.

EAS, Jr.: Yes. When we got there he said, "You are supposed to be doing clinical investigation here just like you were doing at the Thorndike. We got one problem. The room we are going to put you in is rather empty." But he said, "This is your place of operation." The room was equipped with an ordinary microscope and benches that went around the room. It had electricity, water, and suction outlets. It had a bare floor. Soma said, "This is it. I'll see you tomorrow." I asked, "Can we go down and steal a few things from the Thorndike?" He said, "Provided you tell them you are stealing them." So we went down and picked up a tilt table, 3 plethysmographs, and the drums for smoking paper that I had used at the Thorndike. I also picked up my own Brody bellows. *Dick Ebert* was my associate fellow at that time.

JWH: Who else was there?

EAS, Jr.: *Paul Beeson* was the chief resident. *Jack Myers* was also there.

JWH: *Charles Janeway*?

EAS, Jr.: Yes, he handled the infectious disease area. *John Romano*, the neuropsychiatrist, was there and so was *Jack Gibson*. We were the junior team. Jack Gibson was starting his lifelong research career. He opened up the connection between the Massachusetts Institute of Technology and Harvard. They never had any connection at all until Jack came along. He worked out a method to measure red blood cell and plasma volume at the same time. He did this with a man named *Evans*.

JWH: In 1941, Emory decided it was time they had a full-time Professor and Chairman of the Department of Medicine. Paullin had served as a part-time Chairman.

EAS, Jr.: And he was never paid. Nobody in the Department of Medicine had been paid. They were all volunteers.

JWH: Dr. Russell Oppenheimer was Dean, Administrator of Emory University Hospital, and served simultaneously in several other positions.

EAS, Jr.: He made medical rounds sometimes, and he taught physical diagnosis. But essentially his job was administration. There was 1 full-time person in the clinical departments. He was Dr. Bert McCord, and he was independently wealthy.

JWH: He was in the Department of Obstetrics. There were several distinguished professors in the basic science departments at Emory, but McCord was the only full-time member in the clinical departments?

EAS, Jr.: I remember him well. He had a list on the board about what to do for eclampsia. The sign also stated if you don't know what to do, or when the things on this list don't seem to work, call me. And he came.

JWH: Emory made you an offer in 1941 to be the first full-time Chairman of the Department of Medicine?

EAS, Jr.: It really came through the effort of Arthur Merrill. Art was a very persistent man.

JWH: He was 1 of the students you tutored during your undergraduate days at Emory?

EAS, Jr.: Yes. I tried to help B students become A students. I also knew him in Cincinnati. He was studying pathology at the University of Cincinnati. He then went to Vanderbilt in Nashville and married the sister of *Tinsley Harrison*. He was pressing the powers that be at Emory to appoint me the first full-time chairman at Emory. After I got to Emory, he joined my Department of Medicine. He had learned how to measure renin and that was useful to us. He did all the renin work on all of our renal vein samples during that time. He then became halftime. He is the only halftime man I ever knew that worked more than halftime. He was a phenomenon.

JWH: I'll tell you a sad story. I went to the hospital to see Art just 2 or 3 days before he died. He was smiling during my visit. He said, "Gene just called me." You had called him. He was so pleased about that.

EAS, Jr.: I'm so glad I did. He was very important to me.

JWH: Emory made you an offer to become Professor and Chairman of the Department of Medicine.

EAS, Jr.: They wanted to pay me \$6,000 a year and I said I won't come for \$6,000. I said, "The reason is simple. I have watched other people go to other places where they weren't paid enough. They had to spend most of their time not doing what they really wanted to do. They had to scrounge around just to make a little extra money. It always took a lot of time to make that little bit of extra money they had to have." I said, "If I come to Grady Hospital I am going to be there full time and Emory is going to be my only source of income. I need \$8,000 a year. I will not come under any other condition." What people told me later was that the Emory officials said, "When Gene came to see us, or when we went to see him, he never talked about building the department. He never talked about teaching. He never talked about students.



FIGURE 1. This photograph of the medical staff was taken at the Peter Bent Brigham Hospital in 1941, a few months before Eugene Stead became Professor and Chairman of the Department of Medicine at Emory University School of Medicine. Top row (from left to right): Doctors Jack Myers, James Warren, Louis Hempelmann, Max Michael. Lower row (from left to right): Doctors Eugene Stead, Jr., Charles Janeway, Soma Weiss, John Romano. Doctors Myers, Warren, and Michael joined Stead at Emory as did others at the Brigham, including Drs. John Hickam, Abner Golden, Paul Beeson, and Edward Miller.

He never talked about research. The only thing he talked about was \$2,000." I later said, "Well, that was the issue." And Soma backed me up. He said, "I think you are right. You are not going to be wealthy with \$8,000, but with \$6,000 you are going to be poor."

Soma was the only person at Harvard who advised me to go to Emory. He thought that generous benefactors associated with the Coca-Cola Company were in the wings. Other people said I would have a good career if I stayed where I was and that I shouldn't go. Soma said, "Gene, you have been a man of promise now for a few years and you look pretty good. If you go to Emory and do well, you will be a man of achievement. If you don't do well, you can be one of the best practitioners in Georgia." He said, "You should go. You ought to go where you are needed."

JWH: I went to see you in Durham in November 1956 to seek your advice. I had been offered the chairmanship of the Department of Medicine at Emory. One thing you told me then was what Soma Weiss had told you. You said to me, "You have been a man of promise, now you ought to find out if you can be a man of achievement." I have always remembered that. So you had signed up to go to Emory. I gather that Soma Weiss soon died.

EAS, Jr.: He died in January 1942 and I was to go to Emory in May. I took over the Brigham for those few months until I went to Emory. I went to Emory at the conclusion of the Atlantic City research meetings that year. I left Atlantic City to join my wife, Evelyn, who had bought a house in Atlanta.

JWH: I'm sure you could have stayed at the Brigham. You were one of a very distinguished group of people who were there at the time (Figure 1). Did you have any second thoughts about leaving?

EAS, Jr.: First, I knew that Harvard was a pretty sophisticated place. I knew perfectly well I had a lot of rough spots that had to be rubbed off of me before I could really be accepted in that community. I also knew that *George Thorn* was being seriously considered for the position. I knew perfectly well he was a hell of a lot better scientist than I was. *Thorn* was already accepted at the Atlantic City meetings as a much more important person than I was. I said to myself, "I've got the Emory job. Emory was good to me as a student, and I'm going to go back there and not worry about this." The only other person that really pushed me to take the Emory job was Sam Levine. Sam and I had always hit it off and I had great admiration for him. He thought I would be a good professor and chairman. I was a much better person for Emory's rough and tough and tumble kind of a medicine than *Thorn* would have been, and *Thorn* was better suited for the Brigham. He would be better at establishing a strong investigative program at the Brigham than I could have started. The Brigham needed him because the world at the time was passing from pathology into a much more fluid relation with all other sciences in medicine. Henry Christian had not made the transition. By the time I had gotten to the Brigham as an intern some 7 years earlier, the Brigham's heydays were over. The Brigham was living off its past reputation. That always happens. On the way up an institution is always underestimated and then it reaches the top. For a long time an institution can ride on its reputation and then it goes way down before anybody catches up with it. The Brigham internship was no longer the best internship in the country, but I didn't know that before I got there. The reason it worked out for me was that everybody in our intern group meant to be something and everybody thought getting to the Brigham was getting to a great Mecca. When we got there we discovered that there were few people there who were going to be as good as we were. Most of the members of the staff were average, not remarkable. Trainees just went about doing their business, just like we did when I was a student at Emory. We were a first-class group of interns and residents, not because of the senior staff, but because of ourselves. The Brigham needed *Thorn* more than it needed me to make the transition.

JWH: What did Soma Weiss die of?

EAS, Jr.: He died of a ruptured berry aneurysm which could have been clipped. There was a long debate as to whether he should go down to Hopkins where *Walter Dandy* was performing the operation. I was not involved in the decision making. It would have been a long trip, so they elected just to hope he didn't bleed again, but he did. Soma died on January 29, 1942.

JWH: Gene, why do you think Soma Weiss encouraged you to take the Emory job?

EAS, Jr.: I think for 2 reasons. He felt that it would be many years before I could get out of the big crowd of people inhabiting Boston. And by the time I reached that stage, I would be afraid to go anywhere else and I would spend the rest of my life in Boston.

He simply said again, "Go where you are needed. Emory needs you and if you can't do the job, then you should go into practice and let somebody else do the job. But if you go to Emory and can crack the system, you'll make a great difference."

JWH: Did he have any notion then about the potential source of money from Coca-Cola?

EAS, Jr.: I think so. It turned out that the reason I was able to be full time at Grady Hospital was that *Sam Mizell*, in the development office of Emory, was able to get the money from the Coca-Cola Company. *Robert Woodruff* funded my department.

JWH: You married *Evelyn* while you were working with Soma Weiss. She was Weiss's secretary. Since then, you 2 have been a team. Any comments?

EAS, Jr.: I was attracted to her for the usual reasons that men are attracted to women. She was pretty. She dressed well. She carried herself well and Dr. Weiss admired her. Those reasons seemed to me to be very good reasons to select her. We related well to each other and before we knew it we were married. I don't think either one of us had thought too much about it. I think our marriage was based on a few simple foundations. *Evelyn* had a much better general education than I had. I had never been in an art museum until I began to date *Evelyn*. *Evelyn* had the kind of education that few people can get these days. She worked at Mount Holyoke for 4 years after graduation. She came in close contact with a distinguished group of women educators and she learned many things. We settled on a few things early. We both knew, being depression children, to spend money only for the things we needed. We never paid consumer interest. We decided early on that when we had children that we would settle what we were going to do between ourselves and that we would always present a single front to our children. Each of us learned a tremendous amount from each other and we both admired each other. I used to just like to sit and watch *Evelyn* work on a budget and the income tax. She was intent, fast, and competent. When she finished there were no errors. We were a mutual admiration society, and we still are.

JWH: That's great. She more or less took care of the home?

EAS, Jr.: I was completely protected. She had one other tremendous virtue. I made it a point not to discuss individual patients with her, but I did discuss administrative matters with her. She was privy to a lot of information that came from the people who came to our home. Whatever was said in our house never got out of the house as far as *Evelyn* was concerned. That was a great advantage to me.

JWH: You arrived at Grady Hospital in 1942. What were your initial problems there? (Figure 2).

EAS, Jr.: First was money. For as long as Grady had been in existence the house staff had collected money from insurance people. The tradition at that time was for the insurance people to sell policies to the black people who went to Grady when they were sick. These were policies in which the big print gave the people a lot and the little print took it all away. The



FIGURE 2. Circa 1942. At the age of 34, Eugene A. Stead, Jr., MD, became the first full-time Professor and Chairman of the Department of Medicine of Emory University School of Medicine in Atlanta, Georgia. He served in that position from 1942 to 1946.

chief resident had to sign certain papers and for that he got paid. The amount of money came to about \$1,600 a year. My first step was to appropriate the money. The resident didn't love me very much, but the military just couldn't get along without him. So we got a new resident.

JWH: When you arrived in Atlanta as Emory's first full-time Chairman of the Department of Medicine, you discovered you were not Chief of Medicine at Grady Hospital where most of the clinical teaching was done. How did you handle that?

EAS, Jr.: Dr. Jake Sauls, who was a long-time associate of Dr. Paullin, was the Chief of Medicine at black Grady and Dr. Carl Aven, a practitioner interested in tuberculosis, was the Chief of Medicine at the white Grady Hospital.[§] Gene Stead was chief of nothing.

JWH: What did you do?

EAS, Jr.: My first reaction was to think how foolish I had been not to ask that question. My second reaction was to go back to Boston. But then I remembered that the Brigham didn't have any money, either.

[§]At that time, there were 2 hospitals—1 for Black patients and 1 for White patients. The 2 hospitals were often referred to as the "Gradies."

The war was coming on and it didn't seem as though it would be very easy to move back to Boston. On further reflections I thought, "These volunteer chiefs come here 3 days a week and spend 2 hours a day being chief at the hospitals. I am going to live in the hospital most of 24 hours, 7 days a week. If I can't be the chief, regardless of the title, I had better get out of here and go do something else." I learned one tremendous lesson from the experience that has helped me ever since. Authority can never be given, it has to be taken. It doesn't have to be taken destructively, but the person that wants the authority has got to take it and I've lived by that lesson ever since.

JWH: I agree. When I became Professor and Chairman of the Department of Medicine at Emory in 1957, the Dean, Arthur Richardson, said the same thing to me. He said, "The trustees have approved your appointment, but whether or not you can do the job is up to you."

EAS, Jr.: That's right. That's the same kind of statement.

JWH: Within a year you were appointed Chief of the Medical Service at Grady?

EAS, Jr.: That's right. Emory administrators wanted to have a party and a spread in the newspaper to celebrate the fact I had become the official Chief of Medicine. I said simply, "I don't have time for that. I am the Chief. You can do whatever you want to do. So we never had the party."

JWH: Tell us how you were able to get Jim Warren, Abner Golden, John Hickam, and Ed Miller to move from the Brigham down to the Emory and Grady Hospital.

EAS, Jr.: Since I had been advised by everybody, except Soma Weiss, not to go to Emory, I did not feel I was justified in asking some of the young talented people who were on the house staff at the Brigham to join me in Atlanta. I had made no approaches at all. In retrospect, I wondered how I thought I was going to run anything without any help. Somehow that hadn't gotten through to my head. Jim Warren, Abner Golden, John Hickam, and Ed Miller were outstanding people on the Brigham house staff. They simply called and told me they were going to come to Emory the first of July and they thought it would be nice for me to know it. I said, "The problem is I don't know whether I'll have any money to pay you, and I'm not asking you to come to Atlanta." They simply said, "We are not asking you to ask us to come—we are just telling you, since we are going to be there, that it might be useful for you to know it." So they appeared on the first of July 1942. Without those people, I would have been completely submerged in all the problems of Grady Hospital, and with everybody gone to war I couldn't have survived.

JWH: Didn't Walter Sheldon also move from the Brigham to Emory?

EAS, Jr.: Yes. Sheldon took over the Grady division of the Emory Department of Pathology.

JWH: Hickam, Golden, and Miller became members of the Grady house staff. Warren became chief resident to be followed by Hickam and Miller (Figure

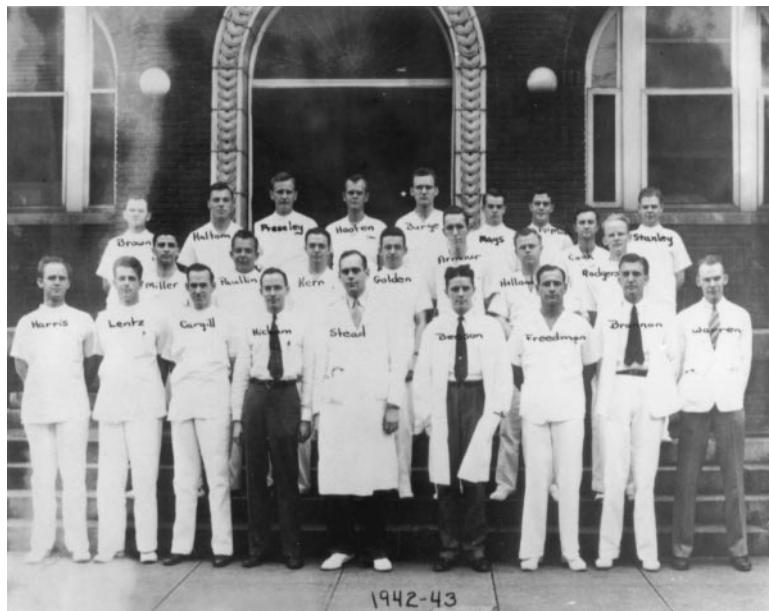


FIGURE 3. This photograph was taken in 1943 in front of Grady Memorial Hospital at the end of Stead's first full year at Emory University School of Medicine in Atlanta. John Hickam (*to Stead's right*), Paul Beeson (*to Stead's left*), Jim Warren (*at right end in first row*), Bernard Holland (*sixth from the left in the second row*), and Abner Golden (*fourth from the right end in second row*) became departmental chairmen.

3). Golden eventually shifted from medicine to pathology. How much did you pay Warren, Hickam, Miller, and Golden when they were on the house staff?

EAS, Jr.: I guess we were in the \$50 a month range by that time, which wasn't very much.

JWH: What did you think about Emory medical students at that time?

EAS, Jr.: I have never been to any place in which there wasn't plenty of talent. The problem is that the school and the faculty do not recognize the talent and do not give the students their head. I have never seen any school that didn't have talented students that couldn't rise to the top and equal the talented students of other schools, if the members of the faculty were willing to hunt for them and allow them rise to the top. I do not believe the student body is an inhibiting factor in any medical school.

JWH: There are 2 physicians we must discuss—the recruitment of Paul Beeson and the other is recruitment of Jack Myers.

EAS, Jr.: Paul Beeson had gone to England as the Medical Chief of the Harvard Red Cross Hospital. The Harvard people were convinced that in due time we were going to be in World War II, and they wanted a Harvard medical school presence in England. *Dr. Eliot Cutler*, who became the Chief Surgeon in the Western hemisphere, wanted the Brigham unit to be the first unit to go overseas. Soma Weiss had told Paul Beeson that he was ideally suited to be the medical chief of that hospital and he recommended to Paul that he take the job. Soma also indicated that, when the war was over, in one way or another, he would take care of Paul. This was never put in writing, but I am certain that would have happened. So Paul went over

and ran the hospital for 2 years. The agreement was that his work there would count as military service. Most people didn't know it, but Paul, from the first time I knew him and for many years before, was subject to recurrent acute urinary tract infections. He had a fistula between his bladder and his rectum. This was discovered and operated on years later after he went to Yale.

JWH: You think that's why he was so interested in genitourinary tract infections?

EAS, Jr.: It might have been.

JWH: I'm sure it was.

EAS, Jr.: So Beeson was not eligible for the draft. He, however, served admirably as Chief of Medicine at the Red Cross Hospital. I was always kind of embarrassed in my position because all my colleagues were in the army. We didn't have any children at that point and I was in perfect health. I was ideal bait for the military. I sat the war out and that was one of the reasons I worked so hard at Grady Hospital. I went to Grady Hospital early in the morning on the streetcar and went home at 10 o'clock at

night on the streetcar, because I didn't want to ask for extra gas. I really did have a guilty conscious. I realized, too, that in the academic world I was going to have a crack at doing what I wanted to do because, at Grady Hospital, we had an active clinical service, a very active clinical research program, and an active training program for young people. Foundations were beginning to notice that we existed. I knew I would have a real advantage over my colleagues who had spent 4 years in military service. During Paul's service at the Red Cross Hospital in England he became interested in infectious diseases. When he was there, he wrote 1 of the best papers on trichinosis that had been written. He was there when sulfanilamide became available. They had never had a man in charge of infectious disease at Cornell. *Dr. Barr*, at Cornell, began to think that with the development of new agents, they ought to pay more attention to infectious disease. He approached *Walsh McDermott*, who was not eligible for military service because of tuberculosis. He had most of 1 lung resected and had pulmonary insufficiency on any rigorous exertion. Barr said to McDermott, "Why don't you stay on an extra year here at Cornell and establish an infectious disease laboratory. If it works, fine, if it doesn't work, you will just lose 1 year, but you will be a little bit smarter before you go into practice." Beeson knew that this negotiation was going on between McDermott and Barr, but it never seemed to come to fruition. Barr kept planning to carry out the plan, but he never quite got around to doing it. Eventually, Barr began to correspond with Beeson and finally offered the position to him. In the meantime I realized I had to have somebody join me at Emory. I knew that John

Hickam, who was with me at the time, would stay with me 2 years but his father was in the army as a general. I knew he was a military child who would go into the service as soon as the manpower pool got where they would take him. At the end of 2 years, they took him. I needed somebody who wasn't going to be taken by the military, and Paul Beeson was obviously my first choice. I liked him. He liked me. We were both young. He had married *Barbara* while in England; she was a nurse in the unit. I corresponded with him, offering him \$4,000 a year if he would come to Grady Hospital as an Associate Professor at Emory. I didn't know that Soma Weiss had written him a letter simply stating that while a place at the Brigham would be open to him when he returned, that he was impressed with what was happening down in Atlanta. Soma advised Paul to take a careful look at Gene Stead's outfit before he returned to Boston. The fact that a position at the Brigham was open to Paul was not affected by Soma's letter, but his advice was for Paul to at least consider the alternative seriously. Paul only showed me this letter a couple of years ago. I didn't know it was in existence. I was praised by Soma more than I realized. Finally, I wrote Paul and simply said, "On such and such date I have to make a move. If you have not accepted my offer by the end of that day, the offer is withdrawn." So Paul, who at that point had not heard anything definitive from Cornell, sent me a telegram saying that he accepted the offer. The next day he got a letter from Barr offering him the job at Cornell, offering him \$5,000 a year. Most people would have accepted the Cornell offer because Cornell was ahead of Emory at that time and Barr had offered him more money than Emory had. Paul, being the kind of a gentleman he was, never raised the issue. He came to Emory. He rented a house expecting to be there a year and be gone. I had bought a house. I left in 4½ years and Paul stayed 10 years. He became Chairman of the Department of Medicine at Emory when I left for Duke University.

JWH: I joined Beeson's Department of Medicine at Emory in 1950. He was, like you, a great department chairman.

EAS, Jr.: He was excellent. He made the place grow right along.

JWH: By the end of 1943, you had attracted a small but great group of senior staff and house staff to Emory. They all worked at Grady Hospital (Figure 3). Gene, tell me about your relationship to Jack Myers.

EAS, Jr.: Jack was a great physician. He was with me at the Brigham. I moved him to Emory in 1945 and later to Duke. He then became Chairman of the Department of Medicine at Pittsburgh. Jack was the best person we ever had to create the initial framework so you could build a more sophisticated learning system. He was superb at it. He was a good research man in the liver area, where he spent most of his time. The first Clinical Pathological Conference Jack gave at Duke was on a patient with tularemia. The whole staff had missed the diagnosis. Jack was a very positive young man. When he got through the discussion, he summed it up and said, "I usually give a differential

diagnosis and frequently that takes up a fair amount of the time, but in this particular instance the data are so clear and everything fits so superbly, that there is no differential diagnosis—it's only tularemia." Which is what the patient had. I had been trying to recruit him, but I don't know why he decided to move from the Brigham to Emory.

JWH: I do. He told me a few months before he died that he wanted to move because he wanted to work with you.

EAS, Jr.: Well, blessings on him.

JWH: He became your first Chief of Medicine at the Atlanta Veterans Administration Hospital because, during that period, the Veterans Hospitals were beginning to join the medical schools. Myers worked half time at the VA and half-time at Grady Hospital. He told me a few months before he died that when you recruited him you told him you thought you were going to go to Duke. You told him that you would try to find a place for him at Duke if that is what he wanted to do or he could stay at Emory.

EAS, Jr.: That seemed a pretty reasonable thing for me to say. In the old days at Duke they were very short of places to hold conferences, and the obstetrics service always had their conference in the hall between 2 rooms. They put a curtain on one side of the conference along with a little sign that said "Don't interrupt the conference." Jack never obeyed it. He walked right through the conference. He said, "Hell, you shouldn't be holding conferences in the hall." That gave me trouble with the Chairman of Obstetrics, but Jack was worth it.

JWH: You presided over "Sunday School" at Emory during the World War II years. We still hear about your "Sunday School" 50 years later. How did that start?

EAS, Jr.: The war was on and a large number of Army physicians were stationed in facilities in and near Atlanta. I created a teaching conference for them. It was good also for my young department, because the Army physicians were from all over the country and they became aware of the talent and ability of my staff.

JWH: But why was the conference called "Sunday School?"

EAS, Jr.: Because Dr. Bruce Logue, who was in the Army at Lawson General Hospital near Atlanta, pointed out that the only time the Army physicians could go to a teaching conference was on Sunday morning before church. So that is when we had the conference.

JWH: As time passed you were asked to be Dean at Emory Medical School. Did you like that idea?

EAS, Jr.: No. The administrative people close to the Woodruffs, who were financing the school with Coca-Cola money, thought it was time for Dean Oppenheimer to retire. The last thing I wanted to do was to replace Oppenheimer, who had held down many administrative posts. (The survival of the school had been in his hands before the other administrators had come along.) I felt, for me to become Dean would have been an act of gross disloyalty on my part. So I

simply said, "I'm not going to take the job. I will go do something else." And they said, "Dr. Stead, we are going to tell you the truth. If you want any financial support from the people who are now supporting the department, it's going to be withdrawn until you take the job." So I went to Dr. Oppenheimer and told him, "If I do not take the job, you and everybody else in the school will be in trouble. If I do take it, I will be replacing you, who really made the school possible. The school would not have survived without you." And, great man that he was, he said, "Gene don't worry about it. I will take care of myself." And so I accepted the job.

I am one of the few people who licked the Peter principal. You know the Peter principal states that an individual who does a job which he is capable of doing well is promptly promoted to a job in which he doesn't do well and he then spends the rest of his life as an inferior administrator. I became Dean, but then gave it up. I was not a bad Dean in the sense of what happened during the time. I continued as Chairman of the Department of Medicine, but began to have less and less time for the work I loved. I discovered that a Dean has the problems the Pope did when he negotiated with Stalin. The Pope wanted to intercede in World War II and do all kind of things, but Stalin said, "That's very nice, but where are your troops?" When I was the full-time Chairman of the Department of Medicine, I had a team. They belonged to me. I had appointed them. I could fire them. They did in general what I wanted them to do. When I became Dean, I had to deal with departmental chairmen who had been there a long time, were set in their ways, had no particular interest in what I wanted to do, and could kill anything I wanted to do by passive obstruction. I decided I wanted to go where the troops were, and I didn't want to have a job in which I had to wait for people to die before I could make changes. So I licked the Peter principal, gave up the deanship, and went to Duke as Chairman of the Department of Medicine. I was obviously offered deanships from time to time, but I never went to look at any school. I said, "Thank you very much, but I've been a Dean."

JWH: Gene, I felt the same way. During my chairmanship at Emory, I was invited to consider the deanship at several places. I never pursued the offers. I recognized the importance of the position, but I did not want to be a Dean. I enjoyed being Professor and Chairman of the Department of Medicine. I liked to be on the firing line.

EAS, Jr.: So did I.

JWH: Were there any other reasons you accepted the offer to be Professor and Chairman of the Department of Medicine at Duke?

EAS, Jr.: Yes. When I arrived at Emory the basic science departments were on the Emory campus. The clinical departments of Emory were on the Grady campus, which was several miles away. A planning committee had concluded that the basic science departments should move to the Grady area. I did not agree with that. When I was Dean, I appointed a long-range planning committee that included my

friend Paullin. The report was completed in 1946. I was able to convince the committee that the future development of Emory Medical School should be on the Emory campus. There should be a private clinic and further development of Emory University Hospital. The Grady presence should continue but, I pointed out, being a public hospital, Emory could not control the future of the hospital. Emory should put its money on the Emory campus. There could be satellites, but the hub of the action should be on the Emory campus. It seemed to me that in the long term that there was no other way to retain control of the future, have access to private patients, generate the income needed to thrive, and build without outside political problems.

JWH: Now, 53 years later, the Emory campus is the hub of a large development. Your ideas have been carried out. The Emory University Hospital has been enlarged several times. There is a large private clinic—The Emory Clinic—with numerous satellites. Emory owns Crawford Long Hospital, which is in the center of Atlanta, and also has a strong relation with the Egleston Children's Hospital (on campus) and the nearby Veterans Administration Medical Center. There are several large research buildings on the Emory campus and more are being constructed or planned. Emory continues to have strong teaching-patient care services at the new Grady Hospital. This was all made possible by *Asa Candler* and Robert Woodruff of Coca-Cola and others, such as *Wayne Rollins* and *Howard Dobbs*. The University now ranks sixth in the nation in endowment and the medical school gets its share. Gene, you deserve the credit.

EAS, Jr.: Let me tell you about the committee that deserves the credit. I had J. Edgar Paullin, *Phinizy Calhoun*, Russell Oppenheimer, and *Glenville Giddings* meet on several occasions to discuss where Emory should develop its medical school. We decided the future development should be on the Emory campus. It was not easy for Calhoun and Paullin, who had spent their professional lives at Piedmont Hospital and had developed it into the best learning unit in Atlanta. They knew, if they signed the report, that Emory University Hospital and its staff would become the dominant force in Atlanta medicine. Grady and Piedmont would never again be the dominant part of the Emory system and their influence would clearly diminish. I remember the final night when I reviewed the report with them. I spent 4 or 5 hours in conversation with the report in front of me. I defended each part of it. I finally came to the end and simply said, "Now you gentlemen have got to make a choice. You can say for the good of Emory University, for the good of Atlanta, for the good of medical practice in Georgia, and support the move from Grady Hospital to the Emory campus. We will continue to do at Grady Hospital whatever Grady will pay us to do. The center of gravity also will shift from Piedmont Hospital to Emory University Hospital. You either sign this or you do not." Paullin and Calhoun said "No problem. We will sign it." They were great men.

JWH: I have always appreciated the fact that in the early days of Emory Medical School that Piedmont

physicians did almost all of the teaching at Grady Hospital. Your 1946 planning report would eventually change that.

EAS, Jr.: It was already obvious to Paullin, who had volunteered his time to teach at Grady, that I, as Emory's first full-time chairman of medicine, had replaced him in the hearts of house staff and medical students. I always believed that the only obligatory duty that medical students had was to be at the patient's bedside whenever important decisions were made about their patients. Whether or not they attended lectures or classes, or what they did outside of that, was their business and there was no penalties attached. They didn't have to go to any exercises, provided they already had the knowledge. I guess I was defending the way I functioned as a student some years before. I also said to the students, "There is one exception to this rule. There is one person here who has made my job possible and that is James Edgar Paullin. He is going to be here at these fixed hours and there are no excuses, except a patient emergency, for you not being with him during those hours. I'm going to be here and I have a sharp eye." That was the only absolute obligation I assigned the medical students. This lasted for about a year and Dr. Paullin said, "Gene, you know you are running the hospital. I have a good time interacting with you, and we'll continue to be friends, but I am going to quit my weekly clinical activities at Grady. You have won the staff, and there is no need in my arguing about it."

JWH: Gene, I am sure you will be pleased to know that the Department of Medicine of Emory continues to have a close relationship with the Piedmont Hospital physicians. Many of our former house officers are on the staff there.

You were Chairman of the Department of Medicine at Emory from early in 1942 to 1946. The local draft board must have been after you during the years you were Chairman of Medicine at Emory.

EAS, Jr.: I met with the members of the draft board every 3 months and they always started off with the same question. I had a very nice relationship with those people. They had taught me as a medical student at Emory, and after I came back to Emory I was as nice as I could be to them. It would have been foolish for me not to be. So we always met as friends. And they always quizzed me about how I was getting along. They complimented me on how well I had done. They always asked me who educated me. I said, "You did." They said, "You turned out all right and we taught you. We have got a lot of bright Emory students and we think we can teach them just as well as you can." I said, "That is clearly your business. It's not up to me to make that decision." They said, "You know we like you, and we wish you could stay at Grady, but we don't feel comfortable deferring you from the draft." I said, "That's your decision. Send me my orders and I will be on my way." I got orders every 3 months, so I would pack my bag, kiss my wife goodbye, and then I would get a telegram saying that the orders were cancelled for 3 months. This went on for the duration of the war. If I had been in their

position, I would have drafted me. My agreement with Emory was that I would not volunteer for service, but that I would make no move whatever to resist being taken into the military. If it hadn't been for the actions of Dr. J. Edgar Paullin, who was not only a great doctor, but a superior medical politician in the best sense of the word, I would have been drafted.

JWH: Paullin was also President Roosevelt's physician. You suppose Paullin had something to do with your repeated deferrals?

EAS, Jr.: I know he did. He handled it personally. He simply learned to take the train that started in New Orleans, came through Atlanta, and ended in Washington. He would get an overnight berth out of Atlanta and go to Washington. He did that every 3 months and each time he came back with another deferment.

JWH: Why did you accept Duke's offer to become Chairman of the Department of Medicine? I know you loved Emory. How did you feel about leaving at that time?

EAS, Jr.: Well, I had a number of things on my mind. I had reasonable assurance from the Emory administration that the report of the 1946 planning committee urging that the center of the Emory operation be on the Emory campus would be approved, but that it would not be implemented very rapidly. I wasn't too worried about that. I thought that would eventually take place. I had the problem, of course, that I didn't have any source of income to support the department. I wasn't in a position to staff Emory University Hospital with full-time faculty. There were a few excellent physicians like Stewart Roberts and Cyrus Strickler, but they were busy with their practices and Emory University Hospital was a little far out from the city. At that time travel by automobile was not convenient. Most physicians, including people like Paullin, simply said, "We can't go to Emory University Hospital. It's too far away from our offices and Piedmont Hospital." Paullin and many others were well established at Piedmont Hospital, which, at that time was near Grady Hospital. Other physicians at St. Joseph's Hospital, which also was near Grady, said that Emory University Hospital was too far away at that time. Emory University Hospital was staffed with general practitioners who had little or no relationship with the medical school or its activities at Grady Hospital, and they did not plan to be involved with teaching and research. I had no real quarrel with the physicians who had been the initial supporters of the hospital. But the old timers were beginning to employ young people who were not interested in medical school activities. I did try to work out a compromise that did work reasonably well. I said, "A person who supported Emory Hospital before I came could continue to have full privileges in the hospital, but that any person who came in as an assistant in the practice would have to be approved by the Dean of the Emory Medical School. The Dean, of course, was me."

When I went to Duke, I found physicians who had come to Duke when there were few patients. Early on nobody had any notion whether the place would survive or not. It was perfectly clear that the physicians

had come to Duke with the belief that Duke had the money to support the medical school. When they got to Duke, they found out that while Duke had received the biggest endowment given to any Southern university, it was peanuts compared to the major eastern universities. So money turned out to be a problem at Duke. But those early physicians did not leave. They set up the private diagnostic clinic. This is what I thought Emory needed. I realized that would take time and Duke already had a private clinic.

JWH: During your tenure at Emory, you, along with Jim Warren, *Heinz Weens*, Arthur Merrill, and *Emmett Brannon*, developed the cardiac catheterization laboratory at Grady Hospital. In 1942 there were perhaps 3 cardiac catheterization laboratories in the world. Your laboratory was among the very early laboratories. How did that come about?

EAS, Jr.: Heinz Weens was the radiologist. He was a great help to us. The story of the development of the cardiac catheterization laboratory is interesting. It became clear, that in spite of the money that Mr. Woodruff of Coca-Cola was putting into the department, that I did not have enough resources to run the Department of Medicine. I needed additional money. Additional foundation money was not an option, so I had to go to the government for money. The first thing that appealed to me was to try to get money for a venereal disease program. We had more venereal disease at Grady Hospital than any place in the world, and short treatment systems were just beginning to be used. The public health service had plenty of money and was interested in signing up Grady Hospital as a major place where patients could be sent for short courses of chemotherapy. I looked into that seriously. I believed we could become a venereal disease center. But Jim Warren said, "We certainly have plenty of venereal disease and the money is easy to get. But we have a problem. The problem is we really don't know anything about venereal disease, and maybe it would be more honest if we tried to get money for something we know something about." He said, "I have heard about this cardiac catheter that they are using to study shock at Bellevue in New York."

About that time *Dr. Dan Elkins*, who was Chairman of the Department of Surgery at Emory, invited his friend, *Dr. Alfred Blalock*, to spend a week at Grady Hospital. He insisted that Blalock go to Grady on Friday, Saturday, and Sunday nights when the "Grady wars" were fought. The wounded came to Grady Hospital. Blalock said, "My God, we've got a war going on in Atlanta. We can get the medical information we need to help our soldiers on the battlefield right here at Grady Hospital." And so Jim Warren and I sat down and chatted with him. Blalock said, "There is an organization that is allocating money to investigators who study shock, blood loss, and blood substitutes." The organization was run by civilians who were the ones that could dole out money for research relative to the war effort. Jim Warren and I made out the budget, indicating the amount of money needed to operate the laboratory. We had never filled out a grant application before; Soma Weiss had

always taken care of that sort of thing in our lives. It looked like we had asked for a pretty good sum. The grant was accepted, and when we looked at the money we found we had 10 times the amount of money we had applied for. My secretary had put the decimal point in the wrong place! It turned out that we could never have run the program on the amount of money we asked for. It took just about 10 times what we had asked for to do the work.

JWH: Did Jim Warren go up to Bellevue to work with *André Cournand*?

EAS, Jr.: Jim Warren spent 3 weeks at Bellevue and was very cordially received by *Richards* and Cournand.

JWH: What did your group do in the laboratory?

EAS, Jr.: We studied shock. We studied the blood flow to the kidneys and to the brain as the result of severe hemorrhage. Grady Hospital was full of "war victims" every Friday, Saturday, and Sunday night, so Jim Warren and I spent Friday, Saturday, and Sunday in the hospital. We slept there, and we had our technicians available on call when we needed them.

JWH: Was this lab near the Emergency Room?

EAS, Jr.: It was within 50 feet of the Emergency Room. Our population of patients were very fond of ice picks. They were used to stab the heart. If the stab wound was in the ventricle, it usually just closed up, but if the stab wound was in the atrium and made a little tear in it, the patient could develop cardiac tamponade. The stabbed person would often make it to the hospital, so we studied cardiac tamponade.

JWH: Was *Dan Elkin*, the surgeon, involved?

EAS, Jr.: Elkin did a lot. We did a little dog work to see how much time it took from the time of the injury to the time tamponade occurred. We wanted to know how often we could aspirate the pericardial blood and get by without surgery. It turned out, however, that the blood in the pericardial space of patients clotted and that licked us. We weren't always able to aspirate the blood that was causing the tamponade, but the surgeons were very good and they were always available.

JWH: In those early days did you have them perform cardiac catheterization on you?

EAS, Jr.: Yes. It seemed to me that if we were going to do a procedure that wasn't commonly done on patients, that the people who were doing it ought to believe in its safety. The best way to demonstrate that you really thought the procedure was safe was to have it done on yourself. Since Jim Warren had done most of the catheterizations and I had done most of the arterial punctures it seemed to me that I would be the subject. We had others who could do the arterial punctures while I was on the table, but Jim was the most experienced with the cardiac catheter. If our positions had been reversed, I would have catheterized Jim.

I got into an argument as to when, after an injury, the venous pressure failed to reflect the activity in the venous system, but was related to the things that were happening in the pleural space. Since our thinking was a little bit out of line with what other people found, we

decided 1 person in our team would be the subject. That person turned out to be me. They produced a small pneumothorax and monitored the changes in intrathoracic pressure along with the changes in venous pressure. So I was the guinea pig for that operation, and I have to say they didn't anesthetize my pleura very well. It was unpleasant for a few hours, but no harm was done.

JWH: Would you say that the laboratory was set up to study physiological responses other than those associated with shock?

EAS, Jr.: Yes. We didn't want to be sitting at Grady Hospital, which wasn't a very comfortable place to live, and not do anything. We always had plenty of patients with congestive heart failure, so it seemed to Jim and me, because the laboratory was set up and because the technicians were on call, that we might as well be working as well as sitting. If there was no patient available for us to carry out our shock protocol, we would study congestive heart failure. It turns out that the main difference in shock and severe congestive heart failure is that in one situation the blood vessels are empty and in the other, the blood vessels are full. A decrease in organ blood flow occurs in both conditions. The studies we made on heart failure led to the publication of many articles in which we tried to define the mechanisms involved in heart failure.

JWH: Jim Warren, Heinz Weens, and Emmett Brannon reported the first case in which the cardiac catheter was used for diagnostic purposes.

EAS, Jr.: It was an atrial septal defect.

JWH: They reported their findings in 1945.¹

EAS, Jr.: I didn't take any part in that particular study, so I didn't put my name on that paper. We had talked about the use of the cardiac catheter in the diagnosis of congenital heart disease, but we hadn't done anything. I was always a little bit skeptical of the teams that turned out a tremendous volume of papers which always included the name of the principal investigator. We did not run the lab that way. So my name is not on the paper.

JWH: You moved to Duke in 1946 and developed a great department there.

EAS, Jr.: I was not happy being Dean at Emory. I also knew if I gave up the job of being Dean to somebody else, that I had so much power in the system that in the end I would keep the power even though I didn't want it. I thought the safest thing to do—if I was really going to lick the Peter principal—was to get out and go to a place where nobody wanted me to be Dean. I reasoned if they thought I wanted to be Dean, they would not have asked me to be Professor and Chairman of the Department of Medicine. I also questioned if I could teach trainees to be doctors at Grady Hospital. I believed I could teach about disease at Grady, but I needed private patients to teach trainees how to take care of patients. I knew it would take a few years to develop Emory University Hospital and to develop a private clinic on the Emory campus. I wanted to go where trainees had to learn to work with, accept, and enjoy taking care of patients

who could say, "I don't like the way I'm treated here. I'm going somewhere else." I wanted to be able to show that caring for a patient who had the disease was as important as taking care of the disease. I didn't think I could ever do that at Grady Hospital, because the patients who were admitted there had no where else to go. At Duke we took care of veterans, we ran a public clinic, white and black, and we took care of paying patients. One of the most important things a doctor can learn early is that there is no relationship between wealth and happiness. If you don't know that, you are not much of a doctor. You couldn't learn that at Grady Hospital. Some department chairmen at other schools took exactly the opposite point of view. They reveled in their hospitals where they didn't have to pay any attention to the people; they just worried about the diseases. That somehow didn't appeal to me. The physicians I got to know, like J. Edgar Paullin, were much more complete doctors. They took care of everybody and took care of them with grace. The Duke's Private Diagnostic Clinic was already in existence and that appealed to me. I had this requirement. If you were a member of the staff and created income at Duke Hospital on the medical service, you paid a portion of your professional fee for the service that my organization rendered to you. They never had real support of the resident staff on the private medical service at Duke until I went there. They thought it would not work, but at the end of a year all their skepticism was gone, and everybody was glad that house officers worked on the private services at Duke.

JWH: They didn't have house staff on the private medical service when you arrived at Duke?

EAS, Jr.: They had it as a kind of vacation for the house staff. If you approach it that way, the house staff doesn't get much and the patients don't get much. The fact that this was part of my house staff program led me to pay even more attention to it than I paid to the house staff program on the public service. I was the only Professor of Medicine at that time who could say that the private service gave better medical service than the public service. If you went to Barnes Hospital and talked to *Barry Wood* and *Carl Moore*, they said they always gave better service on the public service than on the private service. And they believed that firmly. In our situation at Duke, that turned out to be impossible because the same faculty members were giving the care on the private and public services. They were spending the same number of hours on both services. Our patient care on the private service was always better than on the public service no matter how hard I worked.

JWH: At Duke you developed a great department. You decided to give up the chairmanship when you were 60 years old (Figure 4). What was your thinking then?

EAS, Jr.: I looked at other departments of medicine. Quite a lot of them that were led by chairmen who were between 60 and 70 years of age. I looked at what was happening in those departments. I compared what I saw there with what was happening at Duke since I had gotten there. I couldn't find a single

FIGURE 4. This photograph of Stead (front row; eighth from the left), his faculty, and house staff was taken in 1967 at the end of his tenure as Professor and Chairman of the Department of Medicine at Duke University.



department that was headed by a man over 60 that still had the vigor that the Duke department had during my period of time there. And my colleagues said, "Gene, you are the exception." I said, "I'm simply not going to bet on that. I am human like everybody else. If I resign, and give up administrative functions, but continue to teach and do my own kind of research, continue to bring in more money into the department than you are paying me, I could have a good time and Duke would still have my services." I went to *Barnes Woodal*, who was Dean. Barnes and I had many arguments. I would take cigarettes out of his mouth if a patient was present because I didn't believe patients could defend themselves against the cigarette smoke produced by another person. The patient couldn't do anything about it and I really was rigid with a no smoking policy when patients were around. So, when Barnes came in with a cigarette I extracted it from his mouth. He never particularly liked it but he never hit me. I said, "Look, Barnes, this is what I would like to do. I would like to get out of administrative functions at the age of 60. I would like for you to guarantee my income at a certain level until the age of 70. Before I reach the age of 60, I will put in an amount of money to cover the amount of money I receive from the department, and you continue to contribute the amount of money paid me from other sources." I said, "If my health remains good and my production remains good, I will bring into the Duke Medical Center more money than half of my salary. As long as I am healthy, you can't lose." But I said, "If I just get a little impaired so that I am not what I used to be but not impaired enough to fire me, you've still got the greatest bargain of all time. You want to play or not play? He didn't hesitate a minute. He said, "I'll play."

JWH: Your wife, Evelyn, joined *Gloria*, who was Jim Warren's wife, to write the book *Low-Fat Cookery*.² I suppose that was 1 of the first such books (Figure 5).

EAS, Jr.: It was way ahead of its time. It was kind of fun. Gloria was the dietician and Evelyn was the

person who knew, because of her remarkable education, how to put a book together to get it published. The 2 of them made a great team.

JWH: Jim Warren used to say that he didn't follow the diet described in the book. He said he was the control.

EAS, Jr.: And he got quite big. I followed the diet and look at me.

JWH: After you resigned as Chairman of the Department of Medicine at Duke, you went to New York for 1 year.

EAS, Jr.: Jim Wyngaarden became Professor and Chairman of the Department of Medicine at Duke. I knew I had to get out of his way. I had appointed everybody in the department and they had to shift their loyalty to Jim. Jim and I went over the things in the department that I thought had to be changed and that I would change if I remained as chairman. Because I had been there a long time the department and the school paid me the same amount of money during the year I was gone. By the way, I did not get a raise for a long time at Duke. I never asked for a raise in my professional life! The thing that saved me was Bud Busse, Chairman of the Psychiatry Department. Bud was more aggressive than I was in getting raises and Dean Davison became embarrassed about the difference in our incomes and began to give me an occasional raise.

I was given a desk at the Commonwealth Foundation in New York and discovered, to my amazement, that I had a secretary who brought me a cup of coffee every morning. She said, "I've got to know where you are and what you are doing." I said, "You know people have always managed to do that, so you should do it the same way." She said, "No, you do it my way. I'll give you a little black book. You let me see the little book everyday. The book should indicate where you are, what you are going to do, and what your telephone number is." I said, "You are really going to care for me like that?" She said, "That's the way we



FIGURE 5. November 15, 1998. Eugene Stead cooking pancakes for our breakfast. The recipe came from the cook book *Low-Fat Cookery* authored by Evelyn Stead and Gloria Warren.² Gloria Warren's mother created the original recipe.

do it here." So for the first time, I had a little book that I carried around.

JWH: What did you do that year?

EAS, Jr.: I said, "I am going to see whether I can think or not." I said to myself, "I am not going to do what I did at Duke. I know I will be invited to give rounds, to take part in teaching, and be involved at 5 different medical schools. I will thank them, but I am not going to do it." I did make rounds for 2 months at Cornell, because when I got to New York I discovered we didn't have enough money to pay living expenses. I went to see *Hugh Lucky*, the Dean of the Cornell Medical School. I said, "Look, I have been living on charity all my life, and here I am in a place they expect me to have money. Don't you have some type of charity that you can put me on?" He said, "Yes, we are just finishing a new residency place. We will give you an apartment at a very reasonable rent and we will give your wife a cleaning maid once a week. You can have a title in our department. You are expected to make rounds, 3 days a week, 2 months out of the year in return for what we are doing for you." So Evelyn and I lived in that Cornell residents house. The doorman said, "Always go out on 72nd Street because people that go out on 73rd Street are frequently murdered." Anyway, when I got up in the morning, Evelyn and I ate breakfast together. We bought 2 *New York Times*. I took 1 to my office at the Common-

wealth and she took 1 to wherever she was going. Then I sat for a while and thought. Slowly though I began to get tired of sitting in that office. I had to try to use my head and decide what I was going to do the next 20 years. I planned to take over those areas in the department, at Duke that Jim Wyngaarden had no interest in, but which I thought were going to be important in the years to come. I wanted to do something about biostatistics, bioengineering, computer science, geriatrics and find out what really happened over time to patients who were treated for coronary arterial disease.

JWH: So you returned to Duke?

EAS, Jr.: Yes, and I helped develop the Biostatistics Department. I had some interest in the bioengineering field and was able to get some money and to do a few things in that field. I also helped develop the Duke cardiovascular data bank. I could do anything I wanted to as long as I got the money and it didn't cost Jim Wyngaarden anything. Then I thought the time would come when I might like to become a distinguished physician at the Veterans Administration system. I also thought I had better take a look at practical geriatrics. I thought most geriatrics was busy work, but not all of it. I thought I would like to identify what was useful and what was not. I worked in a nursing home for the elderly. I learned a lot. I was never loved by the geriatrics establishment because I didn't really believe all they told me. Anyway, they tolerated me, and I gave a few lectures and had some standing in the field. I did eventually become one of the distinguished professors at the Veterans Administration for 7 years. That could not have been a nicer job.

JWH: You moved to the Veterans Administration Hospital?

EAS, Jr.: No. I stayed at Duke and I kept my office at Duke. I did whatever the Veterans Administration asked me to do, which wasn't much. I did do nearly all of my undergraduate teaching and resident teaching at the Veterans Administration Hospital, and I wrote a few papers.

JWH: Did you work in the nursing home during this same period?

EAS, Jr.: When I worked for the Veterans Administration Hospital I had already started to work at the nursing home. The nursing home was adjacent to Duke. I had always had one of my promising young men handle that service for a year. They learned quite a lot. One day *Jim Morris*, who was a good cardiologist, came to see me and said, "We have run out of people to do what you had us do for years." We don't have the right man to go to the nursing home. You sent us over there for 16 years; we decided we will send you over there." I said, "OK. Turn about is fair play. I'll go." So I ran the nursing home for 4 1/2 years after I returned from New York to Duke. I learned a lot. I didn't learn much by reading books, but I learned mostly by watching many old people. Before I took the job, I went to my 2 doctor children, Nancy and Bill. I said, "If you want to have a little more money saved in the family coffers, I'll take the job. That will give me a little extra money and it will eventually go

to you. Do you want me to take the job or not? If I do, the 2 of you will cover for me at night."

JWH: You always worked well with the Veterans Administration Hospital at Duke. Any other comments about that?

EAS, Jr.: The program in aging at Duke was started in the Veterans Administration Hospital. The program provided the 2 best fellowships at Duke in terms of money. I went to the people who were running the program and said, "Most of the time these things become busy work. You got the money and you don't quite know what to do with it, and you've got somebody in the program now who doesn't want to do much. I will take the responsibility for recruiting for this job. I will give you 2 of the best people at Duke Hospital and they will set a pattern in this program which will last a long time. I am willing to do this free of charge." They said, "OK, we don't know how to find people to work in the program. You go find them." So I really did get 2 very good people. I got Nancy, my daughter, who worked in the program for 2 years and turned in a stellar performance, as she always does. Then I got a young man from the endocrine group, who turned out to be a star. He has gone right up in the aging hierarchy and doesn't do "busy work." He does "good work." The program is still excellent, but not as good as it was in the beginning. Few people abhor busy work with the intensity of Gene Stead.

JWH: When did you stop working at Duke?

EAS, Jr.: I always went to the conferences at Duke. I always believed that the development of young people was facilitated when a senior man watched them work. Characteristically, if the older man asked a younger man to run a conference for 3 months, nobody would go. So I looked around at the young men of promise that were running conferences and I attended those conferences. I wanted to give the young men my support. I thought it was a pretty good day if I took over the last 5 minutes of the conference. I ran very few conferences at Duke. I believe the old people should listen to the young people. But I also thought that the old people, by being there, showed the young people that learning was a lifetime job. Also, I might help by pointing out to the speaker, "You said 'er' 35 times in that presentation. Why don't you practice not saying 'er'." In a couple of months he would quit 'ering'. Sometimes I could not read the presenter's slides. I might give him some general rules for making slides. You shouldn't have anything smaller than typewriter print on a slide.

JWH: When did you stop making ward rounds with students and house staff?

EAS, Jr.: Let's see. I'm 90 now. I was 84, when I stopped about 6 years ago.

JWH: I believe you will be considered the most influential physician during the last 50 years of the 20th century. Osler was the most influential physician during the first 50 years of the century. The last 50 years belong to you. You developed more departmental chairmen than anyone else. I looked up the number. It must be 33 or more. They, in turn, developed a large

number of departmental chairmen. In addition, you developed untold numbers of division directors. They have all carried Stead's ideas to the trainees who worked with them.

EAS, Jr.: I don't take the credit for that. All of them were bright and would have made it without me. They either did more than they thought they could do and performed, or they felt uncomfortable and went elsewhere. And I don't see why a person shouldn't run things that way. I gave them opportunities.

JWH: No Gene, you were a magnet—they wanted to work with you. You started the first Physician Assistant's program in the country at Duke in 1965.

EAS, Jr.: Yes. And I have enjoyed that program.

JWH: I started one at Emory in 1967. I ran the program out of my office. The Dean, seeing its value, took over the program a few years later.

EAS, Jr.: I would say you were an early convert.

JWH: I wrote you and said that I had started the program. You wrote me back stating, "imitation is the best form of flattery."

EAS, Jr.: Well, it is. I think that was a good comment.

JWH: State your view now about the physician assistants.

EAS, Jr.: The National Physician Assistants Day is October 6, which happens to be my birthday. I am always at Duke Hospital on the 6th of October to have my birthday cake. The Duke Physician Assistants have been very progressive in picking up modern technology and doing a lot of imaginative things. It is a great program.

JWH: It's clear you are devoted to the Physician Assistants system. The Duke program is always rated the best. I am happy to state that the Emory program is currently ranked as second in the country.

EAS, Jr.: There is no reason why bright people, put in a good apprentice system with a physician who wants to make them advance, can't become superb at what they do. I take some pride in the fact that people who worked in my organization did 1 or 2 things—they either left or were excellent.

JWH: You taught me more about teaching, thinking, and learning than anyone else. How would you tell students and residents how to grow professionally?

EAS, Jr.: I would say, "If you are not happy in what you are doing, you should do something else." I prize enjoying the day. You see the past is gone, the future is uncertain, and the day is present. This, you know, is not original with me. Osler was a good proponent of that. Many people have appreciated this. I think a person must appreciate that unless people are happy in their work the people around them will be unhappy.

JWH: You developed great departments of medicine at Emory and at Duke. How did you recruit such outstanding individuals?

EAS, Jr.: Only happy people are good recruiters. Why should anyone join a chairman who says, "I had a miserable day. I wish to God I wasn't here." You



FIGURE 6. November 14, 1998. Eugene and Evelyn Stead near the bank of Kerr Lake, North Carolina. The fence was designed to retain the 3 dogs, 2 of whose tails can be seen in the foreground. Thoreau had his Walden Pond. The Steads have their Kerr Lake.

know a bright potential recruit would run as fast as he or she could from such a person.

JWH: You have called yourself a "facilitator of learning." What did you mean by that?

EAS, Jr.: I meant that if you came to work in my organization, the learning opportunities that existed there would be pointed out to you, but if you didn't take advantage of them and become better than you were when you came to us on the basis of your own efforts, then you tended to disappear from my organization.

JWH: Let's talk about "teaching" encounters. How do you view the average medical lecture as a teaching-learning tool?

EAS, Jr.: I have never valued the lecture very much. I do not go to lectures to learn definitive information but to discover if there is a whole area out there that I didn't know existed. If I wanted to learn about the subject, I would go home and study. I had to put a fair amount of my own energy into the effort. The lecture simply opened up to me the fact there was an area I wasn't well acquainted with. The lecturer persuaded me that the subject was important. I rarely took home any details from the lecture. I only took home the information that this was an area in which I should become more active. In general, work by yourself is much more useful than sitting in most lectures.

JWH: Can you define "thinking?"

EAS, Jr.: Thinking is the manipulation of things stored in a person's memory.

JWH: Do you believe thinking is teachable?

EAS, Jr.: Yes. I think it is. I believe you can have thinking ward rounds. I once wrote an editorial on an example of thinking ward rounds. Yes, I believe you can teach people to think.³

JWH: How do you want to be remembered?

EAS, Jr.: As a country boy from Georgia trying to get along.

JWH: Thanks, Gene, for all you have done for the profession of medicine.

EVELYN SELBY STEAD: A CONVERSATION WITH J. WILLIS HURST, MD

JWH: Evelyn, I want to know how it has been to be a partner with Gene Stead all of these years. He has achieved more than any physician I know, and he has influenced more physicians than anyone else. You have been a full partner. How do you see Gene Stead at this point?

ES: Well, I think Gene and I have probably been very lucky. First of all, of course, he loved what he was doing and I was interested. I like to deal with manuscripts, so when he writes, I go over manuscripts and correct anything I think needs correcting and make suggestions. We have had no tragedies in our lives, and I am so grateful for that

kind of good luck. We have 3 healthy children, all of whom perform well, and we also have 3 grandchildren and 2 great grandchildren. I can't say anything about the way the great grandchildren will perform because they are still so young. The grandchildren behave well. We probably spent the most time with the oldest grandchild, Patrick, because from the time he was 5 until he actually went to work, he spent his summers with us and he worked with our son, Bill, in the computer science laboratory.

JWH: You actually built your home and guest house here on Kerr Lake (Figure 6). Did Gene and the family build every part of the 2 houses?

ES: Well, I designed the 2 houses. There are built of concrete block. And concrete block is always a multiple of 4, 8, or 16. So I could take graph paper and count a small square as 4 inches and draw the plans. Then I was the shopper for the project. I went every week to Adams Concrete and West Durham Lumber for materials. They got interested in the project, so they would educate me about what we should do next.

JWH: Gene and you and the children would drive out from Durham to Kerr Lake and work on the house?

ES: Yes. We also worked each summer during 2 weeks of Gene's 1 month vacation. During nonvacation Gene went to the hospital 7 days a week, and on Saturdays and Sundays I would have the car packed and the children ready so we could leave Durham for Kerr Lake at 1 o'clock. We would get home with 3 tired, dirty children, who had to be looked over for ticks and bathed. The children think they built the house.

JWH: So Gene, you, and the children built the whole house.

ES: Yes.

JWH: Including the plumbing, the electricity, everything?

ES: Yes. This was before you had to be so carefully inspected. We couldn't do it today.

JWH: I gather you did most of the work on the guest house, but had some help with some of it.

ES: Yes. We had the concrete company dig and pour the footings. They also did the concrete block work.

JWH: Why did you choose to build your home? What was in your mind at the time?

ES: We needed a base far enough away from Durham to allow freedom and close enough not to spend too much time in travel. We wanted the children to know their parents at work and play. They each had 2 hands and each of them could usually carry 1 block. So each of them was supposed to bring one block at the time.

JWH: That's amazing. I am sure it pulled the family together.

ES: I think it really did. The first thing we built was the bathroom. The bathroom provided an enclosed space. We then built a porch around it. Then we were able to construct screened off areas. We slept on one side of the screen and the children slept on the other side.

JWH: As the house moved toward completion, you were able to spend the night at the house?

ES: Yes. And that helped tremendously.

JWH: Back to Gene. Way back when you were secretary to Soma Weiss, I know you dated some others, but Gene won your hand. How did he propose marriage to you?

ES: Gene called me at the office and asked if he could come by my apartment. I said, "I am going to get the subway to Cambridge. I am going to a concert with Elizabeth Weiss. So I won't have much time." He said, "I don't have much time either because I have to go to a journal club meeting." He came by and proposed and I said, "Yes." I went to Cambridge and he went to the journal club.

JWH: Well, I know it has been a fabulous life for you, and I don't have to tell you the respect and love that everyone has for both of you. I always regretted I never studied under Gene. But, over the years I have studied Gene Stead and have profited enormously from his advice, his letters, our long phone calls, and visits. Evelyn, do you and Gene have any hobbies?

ES: I know you have seen all of these lamps here. When we became interested in early lighting we belonged to an organization called the Rush Light Club. We then became interested in collecting lamps. If Gene was away and had an hour before he had to catch his plane back to Durham, he would go to antique shops and look for lamps instead of going in a bar and having a drink. So the hobby was very healthy. He bought lamps and not whiskey.

JWH: The 2 of you reared 3 children. They are William Wallace Stead, MD, currently Professor of Medicine and Professor of Biomedical Informatics and "the information architect" at Vanderbilt University, Nancy Stead Atwood, MD, who practices oncology in Gainesville, Georgia, and Ms. Lucy Ellen Barnhill, who is a computer science manager with IBM in Raleigh, North Carolina.

ES: I think it is greatly to Gene's credit that 2 of our 3 children went into medicine. I think if Gene had been overstressed or unhappy in what he was doing they would not have wanted to follow him in the same profession.

JWH: Thanks, Evelyn, for all you have done. What great lives you 2 have had together.

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