

Dr. Sanford E. Leeds discusses
the Vanderbilt Years of
Dr. Alfred Blalock

Table of Contents

Introduction	i
Transcript	1-31
Index	32-34

Introduction

Dr. Sanford E. Leeds, a thoracic and cardiovascular surgeon, was interviewed on January 29, 1973 in his office in San Francisco. Dr. Leeds was interviewed specifically because of his early association with the late Dr. Alfred Blalock at Vanderbilt University. Dr. Leeds was a research associate in the surgical laboratory at Vanderbilt from 1936 to 1938. This appointment had been arranged by Dr. Howard C. Naffziger, the Professor of Surgery at the University of California, San Francisco. This close association with Alfred Blalock gave Dr. Leeds ample opportunity to assess the qualities of the man as a surgeon, teacher, and as an individual. He has provided a refreshingly candid and honest commentary on his views of the strengths and weaknesses of Dr. Alfred Blalock. This interview is an excellent supplement to the interview held with Mr. Vivien Thomas (OH 15), as both men worked with Dr. Blalock at Vanderbilt, prior to his move to the Johns Hopkins.

Peter D. Olch, M.D.
Deputy Chief, History of Medicine
Division
National Library of Medicine

This is Dr. Olch, of the National Library of Medicine, visiting in the office of Dr. Sanford Leeds, of San Francisco, January 29, 1973. This morning we plan to discuss Dr. Leeds' association and relationship with Dr. Alfred Blalock. More or less the Vanderbilt years.

Dr. O.: Dr. Leeds, would you start by telling us how it came about that you went to Vanderbilt in 1936.

Dr. L.: Well, in 1936 I finished my internship and I had several interviews with Dr. Howard C. Naffziger to see about training in the Department of Surgery at the University of California, and Dr. Naffziger, who was building up a strong department in surgery, had the concept that his men should have a broad background in some special field and he wanted me to go into bacteriology. This was about the time Dr. Altemeier was starting out and had I chosen to go into bacteriology I would have been in tandem with Dr. Altemeier. But I never liked bacteriology and I did like experimental work and I had had a little work with Dr. Joseph A. Long as an undergraduate in Berkeley. He is the zoologist who taught embryology to the undergraduates and his work is well-known, especially in association with Herbert Evans on the estrous cycle of the rat. He was a great technician, Dr. Long. He made little knives to cross-section embryos and I did some work with him to get the feel of it. I never did anything with Dr. Long that was published. Anyway, when I mentioned this to Dr. Naffziger he thought of two people that I might work with. One was Dr. Dragstedt, in Chicago, and the other was "some young fellow" that he knew that was coming along down in Nashville. I very

wisely, for a change, said to Dr. Naffziger that I didn't know either of these men and that I would leave it up to him, and he arranged for me to go to Dr. Blalock's laboratory. So I went in about June, I guess, in 1936 and I stayed until April 1938.

Dr. O.: And you were there as a research associate.

Dr. L.: Yes, the title I had was Research Associate. Incidentally, as far as funds went, Dr. Naffziger said he could arrange for the position, but funds he couldn't arrange. He suggested I go and see Dr. Harold Brunn. Dr. Harold Brunn was very nice and he arranged for funds for the first year and I only found out later that he had asked Mrs. Walter Haas for the funds and she gave him I think it was five or six hundred dollars for me to go. The second year I was able to get a National Research Council fellowship after an interview with Evarts Graham in St. Louis and that carried me through the second year.

Dr. O.: Well, your functions then were primarily as Dr. Blalock's right hand in the laboratory.

Dr. L.: Dr. Blalock started me right out in the lab. I had very little clinical work. I went to some of Barney Brooks' lectures and ward rounds once in awhile, but most of my time--practically a hundred percent--for the whole time was in the laboratory. Dr. Blalock would come in the morning and plan out the day's work and Vivien would assist me--Vivien Thomas, who is still at Hopkins--and we started right out in doing operations and I learned a lot of my technical things from Vivien. The first thing that I worked with was something

Dr. Blalock and Dr. Tinsley Harrison and Morton Mason had developed, and that was a method of measuring the blood flow by passing a long brass cannula with a fenestrated end down the cava. Later on I was given a project to conduct with Vivien and Dr. Blalock where I was doing the primary work. This was transplantation of the kidney.

Dr. O.: Yes. You've outlined your experimental work very nicely in your paper, "Alfred Blalock at Vanderbilt: Reminiscences of a research associate after 32 years," published in Vol. 9, No. 6, the November-December 1968 issue of the Journal of Cardiovascular Surgery.

One of the things that we commented upon prior to turning on the machine was that you had seen the commentary that Vivien Thomas had made about Dr. Blalock in the Vanderbilt years and subsequently. As we do have your aforementioned paper as a basic outline, we might let you start expanding, as it were, on some of these things. I know you felt that Vivien's comments at times were perhaps a little acid and I'm wondering what your feelings are about Blalock the man and how they were manifest in the laboratory at Vanderbilt and in your experience in subsequent years.

Dr. L.: Well, that's the subject of the entire conference, I think, and these things will come out. Last night I reread Dr. Longmire's little speech and, although most of it was very laudatory, he did have a sentence where he mentioned that Dr. Blalock was human and had some human faults. I have made a few notes, but I've mellowed a lot. I had some very bad times, but on balance it was a very profitable two

years. Of course, I was working very hard and of course that was the idea that I had in my mind when I went there. Dr. Blalock was very kind in many ways. He was very fatherly in many ways. His guidance was often indirect. One thing I remember in trying to recall some of these things was that I'd gotten up late a couple of mornings and hadn't shaved. Apparently Dr. Blalock noticed this and one day he came to the lab without having shaved and he didn't say one word. He didn't have much of a beard and he had these sparse hairs sticking out of his chin and he looked pretty silly. [Laughter] But I got the point. One of the things also that I mentioned in my papers that Dr. Longmire also noticed was that he talked to a lot of people. He talked to Morton Mason, he talked to Tinsley Harrison, I'm sure he talked to Dr. Burwell a lot when he was there (he had left just before I arrived) and other people that he admired and he would distill ideas from them. He would use whatever was good or useful to him and discard the rest. This trait was hard for me to understand in many ways. It was something contrary to my approach to things. As I say, I was a young man-- I think I was twenty-six--and I was sort of immature and unsophisticated. I thought it took a particular kind of person who would have the ability of doing this, who was able to accept things in clear conscience and use other people's thoughts. Dr. Blalock was always able to accept as well as to give and I think this was something very important that I learned from him, that although it may be the Bible's standard quotation, "It's better to give than to receive," I think human nature rebels at receiving and many cases of bad blood are made

by people having to receive if they don't want to. But Dr. Blalock was able to do this and I think this represents his stature. He was a big man and very seldom petty. This recalls one time when he was petty--really he was petty. He had a feud going with Dr. Larson. Dr. Larson was in the Surgery Department and I think he was interested in surgical anatomy, if I recall. He was a younger man, his office was in the experimental side of the hospital which was down the hall from the clinical side. Incidentally, this was a great arrangement at Vanderbilt.

Dr. O.: The close proximity to the labs.

Dr. L.: Absolutely, and of course this made it possible for Dr. Blalock to talk to everybody--Goodpasture was one of the people he liked to talk to--because they were all under the same roof, they all had meals in the dining room and a lot of contact. But this Larson, I don't know what it was that got him started, but Dr. Blalock locked the door between the two labs and he would not talk to Dr. Larson for many months and I couldn't understand it. Of course, Dr. Blalock had quite a temper too and he could get mad. He got mad at me a couple of times. I think I mentioned one incident in the paper when he got mad. I had gone to hear Irving Abell give a talk. Irving Abell was from Louisville and was President of the AMA. He gave a talk at Vanderbilt and that afternoon I happened to run into Dr. Blalock on the stairway. He said, "How'd you like Dr. Abell?" I answered that I thought it was kind of a lousy talk, you know, pure politics--just what you'd expect

from the President of the AMA. Well, he got furious with me. He just got red in the face and he said something and marched off and I was really worried that I had offended him badly. The next day everything was the same as always and we went back to work.

Some of his great qualities I'll go through first, and then I'll go through some that were not quite so charming, if I can recall them. Some of these I recall from reading Dr. Longmire. One of them was his great tenacity. Dr. Longmire commented on it in relation to his operations in surgery where he'd keep persisting trying to make that anastomosis, where other people might have given up. Of course, Dr. Longmire doesn't tell the whole truth at all. Dr. Blalock was not a good technician, and Dr. Longmire was a great technician, and with Vivien standing behind them---- Vivien and I had done all the anastomoses in the dogs and we published the paper in the Journal of Thoracic Surgery, which I mentioned, where we connected the left subclavian artery to the left pulmonary artery. Of course, my experience with suturing had come from doing the kidney transplants. Of course, I didn't realize it at the time, but not many people in the country or in the world were doing vascular anastomoses, although this was in the thirties. Actually, it may interest you to know that we had problems with needles and suture material. The Deknetal No. 6-0 had just come out--5-0, I guess it was--this was a beautiful braided silk and it was strong, but there were no needles to go with it. So we found a needle in the old Johnson and Johnson arterial silk which was put up in a fluid in a glass capsule. We had to break the glass open

and take out the suture material. The suture material was rotten, it would break if you just touched it, but the needle was a straight needle with an eye. When we, that is, Vivien and I, first looked at this needle we couldn't see the eye; we had to put it under a microscope. But later on we could thread it, maybe because we knew the eye was there and we did all our anastomoses the whole time I was at Vanderbilt with a straight needle. I believe that's what Carrel used too--straight needles.

When I left Vanderbilt I met my younger brother in New York and we went to Europe for seven weeks and in Florence I was able to find some little curved round needles which I took home and I used at UC when I did my first work there on patent ductus arteriosus. This tenacity of Dr. Blalock's in the operating room is one thing, but he also had it in other ways, too. If he had a problem, something he was thinking about, he would come down to the lab, not often, occasionally he'd come down to the lab, and he'd bring a letter that he had to answer or some kind of problem and he'd talk about it. This was very flattering to me, of course, because I was just a young person, but I think he did it partly to show me how to think about things but he never labeled it as such. Of course, I got a great deal out of hearing these discussions. He would ask my opinion and of course I'd be a little embarrassed because I didn't know why he was asking me. I didn't know anything. So he would toy with various answers and think and struggle with what he was going to say until he got it right and he would answer the letter or make a decision. He was a great one for making decisions.

His desk was nothing like this. It was absolutely clean and he'd do his correspondence everyday and he was a very, well-organized person. He didn't waste a minute. Incidentally, he had a lot of energy. The two years I was at Vanderbilt he had practically no sickness. He'd have a cold once in awhile. I understand shortly after I left Vanderbilt he had his gallbladder out and I think he was ailing quite a bit and before, of course, he'd had tuberculosis and lost a kidney. Dr. Longmire, in a letter to me (I couldn't find the letter last night), said, and I think I quoted it in the paper, that the two years that I happened to be there were very, very productive years in his career. I think part of it was because I was very dedicated to working and I wanted to produce as I felt I owed a lot to Dr. Brunn for digging up the finances for me to go and to my boss, Dr. Naffziger, and of course I wanted to get a residency in surgery after I left. Incidentally, Dr. Blalock insisted to me, every time the question came up, that I must go back and take my residency. This is what I meant earlier that he took a paternal interest and really guided me and was a very good person to talk to if you had a problem. As far as talking to him about his personal problems, getting close to him in any way, it wasn't. He was the boss and I was the slave, but it worked out for me and I think it worked out for him. Although when he wanted to be, of course, he could be absolutely charming to me or to anyone else. He was very warm. Another thing that always struck me when I was there and in retrospect, he always knew the right word to say to the right person--a master at this. Dr. Naffziger was

a very good politician, a very powerful man and a very astute man. When you were on Dr. Naffziger's service in neurosurgery we all worked very hard. One of my colleagues, senior to me and a resident, always called Dr. Naffziger's service the "six-month trial by fire." I'm sure you, having been through surgical training, know what I mean. We used to have to get up early and shave the patients' heads for him and woe be unto us if we were late or anything. In comparison to Dr. Naffziger, Dr. Blalock really could outcharm and outpolitic Dr. Naffziger and I think that's saying a great deal.

Now my third preceptor, Dr. Brunn, was a different kind of person. He was a very warm, jolly, friendly fellow. Somebody ought to write a biography of him sometime, because he helped all the young men in town, particularly those associated with the Mount Zion Hospital where he was chief. He was also chief at the San Francisco County Hospital, and you may know that he very badly wanted to be the professor at UC and Dr. Naffziger got the job instead of Dr. Brunn. But Dr. Brunn was loyal to Dr. Naffziger and he worked with him for many years. Dr. Brunn was a very powerful man. Had a big practice. He was a pioneer in thoracic surgery and he did the first lobectomy, I believe, and Dr. Graham did the first pneumonectomy.

Another thing about Dr. Blalock, on the plus side, was that he always gave credit when he got ideas from people. He always remembered where he got his ideas. He had a fabulous memory and a fabulous mind. He was very quick and he always gave credit. Maybe this is why he was

able to take ideas and use them because he felt that it was fifty-fifty. Another one of his traits that I came on very early there---- if he did a favor for you, you had to do a favor for him, right away quick. He always thought of something. If I did something for him, you know like doing the lab work, my name always went on the paper, and very often first which was very generous in a way, but not really, because if somebody read that paper they'd say, "Oh, Dr. Blalock wrote a paper." To this day although I'm sure I contributed more than a little, people like Dr. Ochsner who quote the early operation, "Who did the left subclavian and left pulmonary?" he'd say Blalock. My name is first on that paper and it was first for a very good reason. I did all the lab work. Now it's true, the idea came from Dr. Blalock. He walked in the lab one day and he said, "Let's do this." Now one thing about Dr. Blalock that's not as complimentary is this----- I am very sure that he knew who did the first operation of suturing the left subclavian to the left pulmonary artery. It was a German gentleman named Jeger because Jeger's book on vascular surgery was in the library at Vanderbilt. I had been trying for years to get a copy--I collect old medical books and I had tried through Springer, and Old Hickory, and Argosy, and Steckert-Hafner, and I've never been able to get a copy. I imagine a lot of the books in Germany were destroyed during the War. I've been dickering with one of the--I think it's Springer--who are coming out with a reprint of this book and I have it on order for over a year and I keep getting letters, they're going to have it come out very soon. This was an important

book. I think Guthrie's book on vascular surgery and Carrel and this Jeger which was 1912 or 1914 were really basic books on vascular surgery. As you know, the Germans were doing every conceivable experimental procedure in the whole world prior to World War I. I'm sure Dr. Blalock got it from there and he never mentioned it to me and he never quoted Jeger. He didn't have to, so he didn't.

Dr. O.: It's an interesting manifestation that comes along later, I think, too, at the time of the Blalock-Taussig procedure.

Dr. L.: Well, you know a lot more about some of these things that happened after. After the War, I put in five years in the service, and when I got out Dr. Blalock was nice enough to invite me back to Hopkins. That was very decent of him. After I got out, I didn't realize it but I'm sure many of the people who were in the service found out that they had a hard time adjusting to a different life after five years. There were a lot of things--we'd only operated on healthy young men and we didn't see any cancer work or any female surgery or any children's work, so that there was a lot of catching up to do and also a lot of readjusting to do. Dr. Naffziger was nice enough to let me go back to UC for three months where I acted as a resident because I had left a residency, and then Dr. Blalock. I went back there, I think, a month and spent the time with Richard Bing learning heart catheterization which I brought back here and I was the first one to do it here on the West Coast. I did all the catheterizations at Mount Zion Hospital for six years and all the cardiac surgery for ten years until the pumps came in.

When I was back with Richard Bing he told me some things about the Blalock-Taussig controversy as to whose name was to be first on their paper and also at some later time, I had dinner with him in Chicago once and he told me how badly Dr. Blalock wanted to receive a Nobel Prize. Well, Dr. Blalock---- Are you aware of some of this?

Dr. O.: No, I hadn't realized that, but I'm not surprised.

Dr. L.: Yes, well, Dr. Blalock was not a shy violet. He was very aggressive when it came to something he wanted and he pulled every string imaginable, and this time he didn't succeed in getting it. But this is another sidelight into Dr. Blalock. This side of him, of course, I didn't see too much at Vanderbilt. I was in a junior position and my job there was to work hard and do a lot of experimental work. We published sixteen papers when I was there and this was a pretty good output for two people in two years, I think.

An example of his kindness and how warm and friendly he could be is this---- he came to San Francisco with the American College and Dr. Brunn entertained him and took him to Mrs. Haas' home for cocktails, and Dr. Blalock, without even mentioning it to me at any time, called up my mother, and this was a very nice thing. He talked to her for a little while and she was very pleased to hear from him.

I had the impression when I was down at Vanderbilt that Dr. Blalock never did anything without calculating it out first. He planned every step, every move, and you could just see him doing it for his whole life, planning his goals and then going out and making them come true.

Of course, this is a kind of a characterization which many people would find repulsive because it reduces the man to some kind of machine and takes away a lot of the human values that a person could have. Of course, in my relationship to him, although there were human values, I sometimes had the feeling that when he talked to me it was a calculated thing and that he was telling me what I wanted to hear rather than---- in other words, he was manipulating me rather than it coming from the heart. This was Dr. Blalock.

Dr. O.: I gather, at one time he and Barney Brooks had some sort of an out. I don't know whether it was allied to his being asked or going to Hopkins without consulting with his chief or what, but I gather their relationship was one of respect but not a great deal of warmth.

Dr. L.: I don't know if you ever read his obit on Barney Brooks.

Dr. O.: I don't think I did.

Dr. L.: I think it's in the SG&O, I'm not sure. Wait a minute. It's in his bound volumes, The Papers of Alfred Blalock.

Dr. O.: Then I probably have read it but that was some while ago.

Dr. L.: This is something that I read years later and this was not the Blalock I knew.

Dr. O.: It did not ring true, in other words.

Dr. L.: Oh, he was vicious, almost vindictive.

Dr. O.: Of Brooks or vice versa?

Dr. L.: Yes, they asked him to write it and he could be honest at times when it pleased him. He was a little too honest, I thought. But he did it in a subtle way for anybody who didn't know him or know Barney Brooks. And it probably read all right to Mr. Jones or Dr. Jones--John Jones or John Doe--but I think if you read it you'll be a little shocked that he would write something like that. I think he was something like Richard Nixon and he was usually concerned about his image in history and this is nothing to give him a very nice image. It's a very interesting document in relation to Dr. Blalock's character. As I mentioned earlier, Barney Brooks could not be a warm person. His house staff were never close to him. He was nice enough to me. I went and asked him for a photograph before I left and he gruffly said something about how I'd done some good work there or something like that. He was a real stinker to a friend of mine at Vanderbilt named Bernard Weinstein. Dr. Brooks would not have a Jewish resident and there are two stories about that. One is Bernie Weinstein was in line for the residency and Dr. Brooks arranged for him to have it with Cutler in Chicago instead of at Vanderbilt. Another story is from a friend of mine from here named Milton Rosenberg, who is a very fine urologist here in town. Milton Rosenberg is from North Carolina or South Carolina and he went to see his professor about a year in general surgery before going into urology. He'd had a year or two of training there and the chairman of the department thought he might benefit from a year in general surgery somewhere. So Milton, with naiveté, said, "What

about going down to Vanderbilt?" because he'd heard that was a good school, and the fellow looked at him and said, "Don't you know Barney Brooks is professor there?" So that was out for Milton.

Dr. O.: I gather until very recently it was extremely difficult in many places to be a chief resident as a Jew. Certainly the professorships were scarce as could be.

Dr. L.: We had the problem at UC, and Leon Goldman, Jake Smith, and I were the only Jewish residents ever at UC for many, many years.

Another thing that I felt when I was working with Dr. Blalock, and this is part of his tenacity because he really was tenacious. He was like a bulldog when it came to a problem; he'd finally work everything out. There was the feeling that he was a competitor. I had the feeling that he was pacing me; that he was running ahead of me and I was trying to keep up with him and it was the dog with the stick and the carrot idea. This was of course a great means of stimulating me. I guess everybody likes to take it easy at times and I'm not a well-organized person and through his influence I really accomplished a great deal and did an awful lot of work. As I say, my intentions were good; I intended to work. Having just finished an internship at the San Francisco County Hospital, which is now San Francisco General Hospital, and working sixteen and eighteen hours a day; I was used to working. But writing papers was something that I still don't do well and find it very hard to do. I'll come to Dr. Blalock's writing in a minute. But this idea of being a competitor was stimulating but also

sort of frustrating because I never did catch up to him. Part of this was that he would never ask you to do something that he wouldn't do. If you were supposed to get there early in the morning, he was there too, and earlier. This reminds me of a story I heard when I was there, about him and Barney Brooks. I think he often irritated Barney Brooks because his mind was very fast and Barney's was not as fast. He would make remarks sometimes that would embarrass Barney Brooks. One story I heard--and we'll go into this more when we talk about his drinking--was that he came to rounds on a Sunday morning which were held very early, there'd been a big party the night before and he had gotten home very late and he could hardly stand up on his feet, but he was at those rounds. He was sort of reeling around but still having trouble with his equilibrium. As far as Barney Brooks goes, I don't know the whole story of their relationship, but he did want to be promoted and he became full professor at the age of thirty-seven, I guess, when I was there.

Dr. O.: Yes, but not chairman.

Dr. L.: Not chairman. Oh no, Barney Brooks was Chairman. So I guess he was interested in looking. While I was there, for sure, he went to Ford Hospital because when he came back he told me about visiting with Henry Ford--this was senior, I'm pretty sure--and that Henry Ford had given him a watch. Henry Ford liked to do watchmaking as a hobby and gave Dr. Blalock a present of a watch which Dr. Blalock was very pleased about. I had written to my boss, Dr. Naffziger, at the time

about it (I saw in my letters) and Dr. Naffziger wrote back that he was sure that he wouldn't take the job there because it wasn't a university setup. Dr. Blalock was also considering Louisville; maybe that's why he got so mad at me when I told him about Abell. But Dr. Naffziger didn't think Louisville was the proper place for him either. He considered it sort of a second-class situation. There's one other story I recall: when Dr. Blalock was at Hopkins he was trying to get an increase in his salary. As you know, Dr. Graham was the highest paid professor of surgery at one time; in the thirties he was getting \$35,000 I think. Dr. Blalock was working for what he thought was peanuts at Hopkins, so he was offered a job at P&S which Humphreys later got and Dr. Blalock manipulated things--this was Dr. Blalock as a politician, in his character as a politician--and he manipulated things and waved this appointment and threatened to leave and go up to New York, until he got his raise.

Dr. O.: He alienated a few people with that maneuver, I think, in Baltimore.

Dr. L.: Well, he must have made somebody furious, but he got what he wanted. I heard that, I think, from Richard Bing, too. Do you want to talk about alcoholism?

Dr. O.: Yes, I think that's a serious problem that he was apparently faced with for part of his career. Certainly in my day he had a problem.

Dr. L.: In my day it wasn't a problem. He liked to drink and he got smashed a few times, I understand, at parties, but I wasn't at any of the parties where he got smashed. Nashville was a great place for parties. I was an outsider; I was a stranger in a foreign land. Nashville was more foreign to me than many countries in Europe I've since visited. I came from the West where people thought about things differently. The first time I rode on a Jim Crow car, I sat in the back where I like to sit and found that I was sitting among all the black people. I didn't realize what I had done until later. I was shocked one morning when a black man was walking down the street toward me and the black man walked into the gutter and he took off his hat-- an old darkie--and he said, "Good morning, suh, how are you suh?" I just felt sick about it. So these were things that I---- and also the Jewish people there. I remember Bernard Weinstein bragged to me about how they had their own golf course and their own country club and their own part of town where they lived in their nice homes and of course this didn't strike me as being anything to be very proud about. The parties were great. Everybody went to them and everybody had a good time. This was real southern hospitality. The school had parties, the undergraduate school, the medical school, and everybody really got together. As far as alcoholism, it wasn't a problem either with him or with Mary Blalock when I was there. His children were young. Mrs. Blalock used to come to the lab once in awhile with the kids and say hello, and I was at their home a few times. He liked to drink and I remember he invited me over New Year's Day to watch the Rose Bowl game

because it was out on the Coast and he knew I'd like to watch it, and he'd pour me these strong drinks and I'm not a drinker. I can drink a drink or two, but when he poured them, wow! and I'd just have to leave them there. I felt that I wasn't a very good sport, that he would prefer that I drink with him but I just couldn't keep up. Then of course later on it's all heresay about Mary becoming very sick and having liver trouble and then Al having a problem, too. Vivien told me about that when I visited back there. He'd lock himself up after dinner with a big drink and apparently he worked in the evening in this way. But of course a lot of brilliant people have been able to work and drink, like Edgar Allen Poe and so on, but in Nashville it wasn't evident.

One of the very nice people in Nashville was Cobb Pilcher. He was a neurosurgeon. He was relatively young, and I didn't know it but apparently he had a drinking problem and committed suicide.

Dr. O.: Is that, I didn't realize he committed suicide. I know he died around the age of forty-five.

Dr. L.: Yes. Gee, he was a nice guy. He was a neurosurgeon with a tremor, but his tremor always stopped at the right moment when he was operating. Dr. Blalock always used to say that every neurosurgeon he knew was crazy except Cobb Pilcher and Dr. Naffziger. But Dr. Pilcher was a very, very nice man. Very kind.

Dr. Naffziger became disenchanted with Dr. Blalock. He was in love

with him when he sent me to Vanderbilt and he thought a great deal of him; admired him a lot; thought he was a fine young man coming on. In his letters when I was at Vanderbilt, Dr. Naffziger mentioned that he would like or was considering having Dr. Blalock come out as professor on the West Coast but I doubt if the invitation ever became formulated; it just didn't come to fruition. After the War when I was in practice here at home, Dr. Blalock's name came up and Dr. Naffziger made some crack about him. The other night I was talking to Dr. John B. deC. M. Saunders about it. Incidentally, I mentioned that you were coming out and he had met Dr. Blalock during the War. Dr. Blalock and Dr. Naffziger went to Pearl Harbor to see how the wounded were cared for. Dr. Saunders and Dr. Abbott--Abbott was an orthopedist, professor at UC--went to Mare Island to see how the wounded brought in from Pearl Harbor, particularly orthopedic cases were cared for, and apparently the wounded were very well cared for in both places, according to their report. At that time I guess Dr. Blalock and Dr. Naffziger were still quite friendly. But Dr. Naffziger got turned off in some way. Dr. Saunders said that although Dr. Naffziger would take a drink, he was somewhat abstemious and I guess a little puritanical about it.

Another story that I referred to earlier about drinking was with Dr. O. T. Claggett.

Dr. O.: Claggett of Mayo.

Dr. L.: Mayo Clinic. Dr. Claggett was sitting next to me at a dinner of the Pacific Coast Surgical, I think it was, in Palm Springs. Mrs. Clark--Al Clark's wife--was sitting between us and Bill Silen was sitting across from me (Bill is Professor at Harvard at Beth Israel; he took Fine's place and he's from Cal) and Bill said to me, "What's this about Dr. Blalock's drinking?" I said, "Well, he liked his drink, he drank strong drinks and he drank quite a bit." Of course, I'd heard stories about his drinking after he went up to Hopkins. Claggett said, "Well, I knew Al Blalock and I stayed at his house and he stayed at my house and that man never drank too much at all; I've never seen him intoxicated," and he was very huffy. He had to defend Dr. Blalock which was asinine, I thought. I guess it illustrates the close feeling people sometimes develop for their friends. Anyway, I was quite surprised at Dr. Claggett because I figured he was an outstanding man with a tremendous background and that he would be a little more sophisticated. But he was quite offended that we would even discuss it.

About his technique in surgery. You know Ravitch's description about the whining.

Dr. O.: Oh yes, I experienced that personally.

Dr. L.: Oh yes. When I went back, Harry Muller was resident and he took a beating for hour after hour. Not in character because he had such control out of the operating room, but in the operating room I guess not. Maybe, I don't know, he had to learn a lot of general surgery after he left Vanderbilt. He did very little there. I

remember he did a thoracotomy. I think I was in the operating room at the time. The operating room at Vanderbilt was sort of interesting because in the summer it was hotter than hell and they had a big bowl of ice with a fan behind it blowing toward the operating table to cool the O.R. off. The procedure was finished and Dr. Blalock was going to put in a chest tube for suction--an underwater seal suction. He put the tube in and hit the intercostal artery and the patient began to spurt blood. How could he do it? I guess he just had capabilities in that direction. In the lab he would do things like passing the cannula down, but actually after I got started there he did very little operating. Once in awhile he'd come in just to show that he was one of the boys and he could do anything we could do and that he wasn't going to ask us to do something that he wouldn't go. That was the feeling I got, but as you know, he wasn't expert as a technician.

Dr. O.: I think Ravitch, in his biographical sketch of Blalock, glosses over the situation. He says this is his way of teaching. Having stood next to this man many a time where he's repeated questions to the resident: "Is this a big enough bite?" "Should I put the suture there?" and not just in a quizzical way but sometimes almost panicky and whining. It was quite an eye-opener.

Dr. L.: I think you're probably right. Now Mrs. Grebel, when I was at Hopkins working up some material for that paper, I talked to her about Dr. Blalock and she made an interesting point, that he could

never do anything. He couldn't open a window. He couldn't turn on the heat. He couldn't adjust the thermostat. He was completely helpless and she would have to do everything. Well, this was a device of Dr. Blalock's for other people. He trained them to look after him so that he wouldn't have to do anything he didn't want to or anything time-consuming himself so he was free to do all the many things he did. Of course, I was impressed with his output. He was a dynamo. At Hopkins he would have lunch and then go to the Hunterian everyday. He had a tremendous number of letters to dictate. He would write papers which he would do at night. I think this is the way he conducted things so people would do things for him. As far as his consulting the resident, this is always flattering to the resident, too, and this is the way he handled the resident to get the greatest output from him. Of course, this was good for the resident, I guess, but it was also good for Dr. Blalock. I had a little remembrance in connection with his being fair and giving credit. I was getting ready to come home (I was going to Europe with my brother first and then come home), I was getting ready to leave Nashville and things were a little strained with Dr. Blalock and me because, you know, I'd put in two years and worked very hard and I was ready for a change. He was all right; he had a dinner for me at his home with the residents. Incidentally, he only put white meat on my plate which I interpreted as being a little patronizing--that was chicken or turkey, whatever it was. I happen to like dark meat. [Laughter] Anyway, we had done a lot of work with the Goldblatt clamp and we had some dogs in which

we had put Goldblatt clamps, at Dr. Blalock's suggestion, on the superior and inferior mesenteric artery. Of course, this is a demonstration of how far reaching his experiments took him and how modern some of these experiments are because only in recent years have people become aware of abdominal angina and perforations from necrosis of bowel wall and so on. But we were doing this in connection with hypertension and trying to produce hypertension and nothing happened. So I got a bright idea--I used to brood about these things too and sit up and worry and wonder about things to do, partly because Dr. Blalock had shown me the way and how to think about problems. This was one of the fun things about research. You can be creative, you can do new things, and this was one of the parts that was most stimulating. If you could bring something in and he'd give you a pat on the back this was pretty good for morale. So I got the idea maybe if after producing ischemia of the bowel, we should then put the clamp on the kidney. By golly, we got a higher hypertension than we did without it and this is something that's in the back of my head to pursue sometime because the experiment stopped, the paper is published. But Dr. Blalock, instead of having no paper, had a paper now. I got full credit because Dr. Cressman had just come and he finished out part of the experiment but my name went on the paper. Also I got good billing because this was my idea. So there wouldn't be any confusion between myself and Cressman, Dr. Blalock put his name first which was fine, then my name and then Cressman's. I think this represented his eminent fairness in giving credit for an idea. I felt that he was always very dominant;

always in command. He dominated me often in very subtle ways, but there it was and this is hard to take month after month, but it really didn't bother me too much most of the time. Toward the end, before I left, I think it got to me.

Dr. O.: You were ready for a change.

Dr. L.: Yes, I sure was, but it was a very fruitful two years for me as well as for Dr. Blalock--sixteen papers. My chief was very happy with me--Dr. Naffziger--and he wrote it in letters and he was very pleased. Dr. Brunn was very pleased with me and it really gave me a running start when I came back. I had awful problems getting started doing any research at UC, but that's not anything you're especially interested in. Now it's a big research school; then, nobody knew anything about research. I couldn't get a Van Slyke going for three months and stuff like that.

Because he was so dominant and I wanted to try and think for myself and feel that I was thinking for myself, I did two papers with a chap named, Tommy Diaz. They were two of the sixteen papers. Tommy was from Stanford Hospital in San Francisco in OBG and he went back with John Burch, so we became friends. We bought a Model A Ford together. The first weekend I was there we drove to Chattanooga; after that I didn't have time for weekend trips. Never went anyother weekend. So Tommy had an idea it would be nice to measure blood pressure in rats. So we developed a pressure cuff to put on a rat's tail and we cut the tip off and watched the arterial bleeding and pumped up the pressure with

the pressure cuff. We wrote a couple of papers on the method and what we found which were published in the American Journal of Physiology.

Well, Dr. Blalock didn't give me any encouragement at all for doing this.

Dr. O.: It was independent work.

Dr. L.: Yes. I was taking time away from the lab. He was possessive. I remember once Tinsley Harrison approached me and asked how would I like to work for him and I said, "Well, I'm working with Dr. Blalock." The idea of working for somebody else was one that I knew would be disapproved of by Dr. Blalock. So I never even thought about working with Dr. Harrison.

Rudy Light worked with us in the lab. Rudy was the scion of the Light family. His father was with Upjohn and they were very wealthy. In fact, Rudy rented a great big house in Bel Air district and hired away Barney Brooks's butler who was very good at making mint juleps. Rudy was a jovial fellow. Kind of a lightweight in other ways. He was a medical student and he wanted to do experimental work in the lab. I had a lot of fun with Rudy. Rudy was jovial and a nice guy and belonged to the Bel Air Country Club. We used to go out and play tennis in the hot sun at noontime and then go to his house and drink mint juleps till I was smashed--I can't drink worth a damn anyway--and then have dinner and go home very lightheaded. But Rudy is another story. Rudy finally passed away and he gave a lot of money to Vanderbilt for an Experimental Surgery Laboratory.

Ralph Cressman followed me (and you may be interested in interviewing him, I can help you get his address). I have a note here he referred to Joe Beard all the time--Dr. Blalock did-----

Dr. O.: He was one of his early associates?

Dr. L.: He was before me. Joe did some of the work, I think, on the chemistry of shock. Dr. Blalock continually referred to how hard Joe Beard worked, how early he got to the lab in the morning and so forth. I did one paper on shock--blood flow in shock. Of course, shock is Dr. Blalock's opus at the beginning that really got him on his feet in the research field.

Well, there is something I wanted to say about Dr. Blalock. I could never understand his motivation. I never could understand why this man wanted to work so hard, why he wanted to publish more papers than anybody else. This was like Cushing. Cushing was very compulsive and you know he admired Dr. Osler a lot. There's a famous letter from Osler to Cushing telling Cushing in cards and spades just what he thought about him for some of his actions which Osler found offensive, such as being possessive and grabbing cases, and mean to the house staff and everything. Cushing emulated Dr. Osler as a book collector and he became quite a bibliophile. His collection of books was 6,004, I think, because Osler's was 6,000 and Dr. Blalock was something like this, too. He had to have more papers, more degrees, more than anybody else, and this I never could fathom. Of course, this is from watching his career later on.

We had three black men working in the lab. Vivien was in charge and he was the master technician and he told the other two fellows what to do. Sam set up the packs and did all the sterilizing. We did a lot of surgery and he was very busy every day. He was a work horse, and didn't talk much; he was always chewing tobacco. The third one--I have Aesop down--his name may have been Abel; I don't recall. All he was good for was sweeping out, he was quite an elderly man, and keeping us supplied with Coca Cola. Dr. Blalock was a great Coca Cola drinker and a great cigarette smoker--in between operations, well, every time he came in--he was always smoking a cigarette and always held the cigarette a certain way. I can still see him. They made a place for me the very first day in the lab in the big icebox where we put the dead dogs. There was a rack around it and we kept cokes in there and Aesop made a little profit on it, I guess, and he kept us supplied. It was very hot in the summer and the cokes were wonderful.

Well, I'm coming to the end. There's another comment about Dr. Blalock and his great skill in speaking, but before that I want to talk about his skill in writing. Writing to me is very hard. I write everything five, six, ten times and then it's lousy. Dr. Blalock, of course, you never knew for sure about what he was doing, but it appeared that what he would do was take a chart of experiments--when we'd finish ten or fifteen experiments he would make a chart of the results and this was the same chart that would be typed and go in the paper. He'd take it home and he'd come back the next day with a paper. He would write an introduction, method, results, discussion, conclusion and very seldom

would a word or two have to be changed. I insisted on writing a paper-- one of the papers. He wasn't too anxious for me to do this.

Dr. O.: In other words, he would list you as senior author but he would have written the paper?

Dr. L.: Yes. He would always show it to me in his script before it was typed and I was welcome to make corrections and changes which I would do but they were always very minor. We would talk about certain things before he wrote it up, too. We would discuss because I would be reading in the library. They had a very nice library there.

Mrs. Cunningham was the Librarian, the wife of the professor of Anatomy. I was always very impressed with the facility with which he could write. Of course, he spoke very well, too.

[End of Side I, Reel 1]

[Side II, Reel 1]

Dr. L.: As I say, he was a very skillful and facile writer and he used to get after me to write in pencil the way he did. I always wrote with a pen because that's my habit. I took notes in college for four years--very full notes--so I could use them at final time and I was a good student at college. I always wrote in pen and then I would cross out and write over it. He wrote in pencil and then he'd use the end of the pencil with the eraser on it and change a word or two and he would prefer me to do that and I'm kind of stubborn, or else have bad habits.

In speaking, it was always interesting to watch him at the lunch table at Vanderbilt. A bunch of doctors would be sitting around--on the staff--there'd be a lull in the conversation. Dr. Blalock would have been quiet up to this point. Then in the lull he would start talking about something of interest to everybody. It would be local politics, what the county medical society was doing. He would bring up some topic of general interest and he would expound on it and give a couple of sides of it and then there'd be general discussion. It was very interesting to see him operate because he could do it and not many people can. I admired him for being able to do this.

I mentioned that he was very ambitious and I understood that he wanted the Nobel Prize very badly and he tried very hard to get it. As far as loyalties, he was a very loyal Southerner. My word, anything having to do with the South, with Georgia. Gone With the Wind came out when I was there and this was must reading. Everybody talked about it every noontime in the doctor's dining room.

Dr. O.: It must have been an experience coming from the West.

Dr. L.: Well, there are a lot of contrasts. I lived in a boarding house and one of the fellows upstairs was an engineering student in Knoxville--the University of Tennessee. He was working on the highways for the state during the summer to make some money. I went up to his room and he was getting dressed to go out and he pulled open his sock drawer and there's a loaded .38 caliber pistol! I got scared just looking at it, and this was typical, though, of southern households,

they all had weapons. He was very loyal to everything southern and he was really a loyal friend. You could count on him. When I worked there I knew I could go to him if I had any problems--I didn't have to bother him often with problems. But I did have a problem that I did discuss with him. I recall one and that was whether to stay a second year. I mulled this over for a long time. I took the cue from him and mulled over this problem. I think before I went there and was exposed to him I would have just decided something, but having been exposed to him and watched him mull, I mulled too. I wrote to Dr. Brunn and Dr. Naffziger and asked them what they thought and I talked to Dr. Blacklock at some length about it. Of course, he may have been a little prejudiced because he wanted me to stay a second year.

Dr. O.: He had a producer in the lab.

Dr. L.: I finally decided to stay and I think it was a good decision. Certainly it was a deliberate decision.

Index

Abbott, Leroy C., 20

Abell, Irving, 5

Altemeier, William A., 1

Anti-Semitism, 14, 15

Beard, Joe, 27

Bing, Richard, 11, 12, 17

Blalock-Taussig controversy, 12

Brooks, Barney, 2, 13-16, 26

Brunn, Harold, 2, 8, 9, 12, 25

Burch, John, 25

Burwell, Dr., 4

California, University of (Hospital), 15

California, University Medical Center, 25

Carrel, Alexis, 11

Claggett, O. T., 20

Cressman, Ralph, 24, 27

Cushing, Harvey, 27

Diaz, Tom, 25

Dragstedt, Lester, 1

Ford, Henry, 16

Goodpasture, Ernest W., 5

Graham, Evarts A., 9, 17
Grebel, Mrs. Francis, 22
Guthrie, Charles C., 11

Haas, Mrs. Walter, 2, 12
Harrison, Tinsley, 3, 26

Jeger, Ernst, 10, 11

Larsen, Ralph M., 5
Light, Rudy, 26
Long, Joseph A., 1
Longmire, William, 3, 4, 6

Mason, Morton, 3
Mount Zion Hospital, San Francisco, 9, 11
Muller, Harry, 21

Naffziger, Howard C., 1, 2, 8, 9, 17, 19, 20, 25
Nixon, Richard, 14

Osler, William, 27

Pilcher, Cobb, 19

Rosenberg, Milton, 14

San Francisco County Hospital, 15
Saunders, John B., 20
Silen, William, 21

Thomas, Vivien, 2, 3, 6, 7, 19, 28

Weinstein, Bernard, 14, 18