

OREGON HEALTH & SCIENCE UNIVERSITY

ORAL HISTORY PROGRAM

INTERVIEW

WITH

*Scott Hamilton Goodnight, Jr., M.D.*

Interview conducted October 9, 2015

by

Grover C. Bagby, M.D.

Narrator: Dr. Scott Goodnight  
Interviewer: Dr. Grover Bagby  
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Transcribed by: Teresa Bergen

**[Begin Track One.]**

Grover Bagby: My name's Grover Bagby and I'm interviewing Dr. Scott Goodnight for the OHSU Oral History Program. It's October the ninth, 2015, and we are in the Biomedical Information and Communications Center Building at OHSU. Thanks for coming in from Hood River to tell us about the history of OHSU.

Scott Goodnight: Looking forward to it, Grover.

Bagby: You are one of the faculty members that I knew that actually was raised in this town. Can you tell us a little bit about your early childhood and how it all started?

Goodnight: Yeah, well, I guess it started with my father moving here from Wisconsin. He went to medical school at the University of Wisconsin, where his father was the dean of men. And after two years of medical school here with his father sort of the spreading tree, he was a very powerful guy, and he [my dad] decided to escape and to come to Portland to the University of Oregon Medical School for his two clinical years. So he arrived here in about 1930 with my mother. And went into, first, he had several fellowships in pediatrics. And he ended up joining up with Bill Bilderback who was the first chair of pediatrics here, I believe, at the medical school. And then the two of them went into practice downtown in Portland, down by Lincoln High School. The Children's Clinic, it was.

He had me in 1939. And I grew up in Northwest Portland. And then they moved out toward Lake Oswego. I went to Chapman Grade School, back in the day when it wasn't quite so chi chi as it is now. And then I went to Riverdale Grade School, and then on to Lincoln High School.

And from there, I went to college at the University of Oregon and studied pre-med, along with a certain amount of partying and other endeavors. I had the opportunity to do some research in statistics with a guy named Fred Andrews there, [on] one of the first computers of the day, which used little [punch] cards that went through [a machine]. And then I got a Heart Association scholarship in the summer. And I got to come up and work with Don Pickering and Nick Kontaxis up at the university here.

[I] applied for and went to medical school. Had a very good time there. The first two years were almost all basic science in those days. There were virtually no clinical activities at all, except for Howard P. Lewis' physical diagnosis class. Which was famous, and I must say, I kept the notes from that class for at least thirty years. It was a work of art, I must say.

And then it was on to the clinical years. Had some interesting episodes there. We got to see the first dialysis over at the VA. I don't know if you, no, you probably don't remember that. And of course Dr. Starr put in the first mitral valve about that time. So anyway, that takes us up to the era I was at.

Bagby: So, let's get back to the college days. Did you meet somebody there that had an impact on your life?

Goodnight: Indeed. I had a friend who knew a woman who was struggling in organic chemistry. So indeed, I decided to help her out. And we would study in Deady Hall, which was the mathematics building. I was a mathematics major. And we would climb up the fire escape on the outside, climb into a classroom and we could study there and use the blackboard and so on. Anyway, I ended up marrying her. She [Cecelia Parker] was from Hood River. Very bright. She was a Winter Festival queen and Phi Beta Kappa and all the rest. Much smarter than I am.

Bagby: Yeah, I know how that works. So then if you, so you actually got involved with biomedical research pretty early.

Goodnight: Yeah. It was in the summer. And they, I can't remember who offered the first scholarship. But I applied for it and got it. And we did research in statistics. And I can't quite remember what the project was. But I knew that there were millions of these, what kind of cards do you call them that you put in a machine and go boom, boom, boom, and they had holes in them. And you could either, you could stick knitting needles through them and pull out certain groups of these. So it was pretty [primitive].

Bagby: We're the only two people in this room that understand what you're talking about.

Goodnight: Then I got the Heart Association fellowship in a summer and came up and worked up on the fourteenth floor of the University Hospital, which was where the Peds research labs were. And Don Pickering, I think, was chair of pediatrics there at that time. It was before he went over and started the Primate Center. And he had a PhD working for him by the name of Nick Kontaxis, who was a wonderful guy. He'd emigrated from Greece. And he taught me a lot about biochemistry and column chromatography and purification and so on.

Bagby: Did hemostasis and thrombosis sort of emerge as an interest at that point? Or was it later?

Goodnight: It was later. I would say when I returned to be a resident in medicine, one of my attendings, one of my first attendings was Dr. Arthur Seaman, who was a hematologist. He was head of the Division of Hematology. And he was a blood clotter, as we call it, someone who's interested in hemostasis and thrombosis, or bleeding and clotting disorders. And as a resident, I might find a patient in the night who was bleeding. And I would call him up and he would come right in. I would follow him up to his lab after drawing some blood from the patient. And at two or three in the morning, we'd be sitting there doing coagulation tests to figure out what was wrong with the patient, why he was bleeding. And then we'd go back down and see the patient. Anyway, that was pretty fascinating. We saw patients with disseminated intravascular coagulation at that time, which was a new entity, and extremely frightening.

Another big influence was a physician by the name of Dave Kliewer K-l-i-e-w-e-r.

Bagby: From Corvallis.

Goodnight: From Corvallis. And he had been instrumental in starting up the Corvallis Clinic in the early days, which was way ahead of its time. He was an interesting fellow who went to Harvard or Yale, I think. And ended up going in the Marine Corps in World War II. Became a flier. Two weeks later was shot down and spent four years in a Japanese prisoner of war camp.

But he came out of that. Ended up going to the University of Washington to Medical School and became a hematologist. And then went into practice.

And he would come up for two months at a time, like three days a week, and make rounds with the resident on hematology. And when I started out, I figured well, I'm a pretty hotshot guy. And I tried to impress him. And I quickly learned that he knew a lot more than I did. Anyway, it was a wonderful experience. He was a wonderful human being. And he taught me a lot about empathy and caring for the patient.

Bagby: I remember him very well. He's really an impressive man. What do, was the fact that your dad was a physician, did that have a positive or a negative impact on your decision to do what you have done?

Goodnight: He was a pediatrician. And I overcame the negative impacts of the endless telephone calls every night with children who were vomiting and had earaches and so on. But I was interested in medicine and pressed on in spite of that.

Bagby: So after, what happened after you graduated from medical school? What was the next year? That was an internship year?

Goodnight: It was.

Bagby: And that wasn't done here, was it?

Goodnight: No. It was done in Minneapolis. Sort of an interesting story, when I was a third year medical student and had married Cecelia, I belonged to the Student American Medical Association, which was a group of medical students at that time. I, in fact, was the president of it here in Oregon. And the SAMA joined up with IFMSA, which was the International Federation of Medical Students. In Europe the medical students couldn't get any work in the summer. So they would just go back and forth to other countries and other hospitals for the summer. And they had this exchange program. And I was the first [U.S.] person to use it and [we] went to Greece. Cecelia and I got a motorcycle in England, a used motorcycle, and drove it clear down to Greece. And spent six weeks in Greece at a hospital there with my Greek friends, other medical students.

And on the way back, the [airline] company that we'd engaged on this flight went bankrupt. And so we ended up in New York with no money. I think we had \$1.35 and we decided should we get a beer or a hamburger. And we decided, well, a beer.

So we went to the bar and it was very crowded. And the woman, waitress there, said, "Would you mind sitting with this gentleman over here?" We said that would be fine. And it turned out to be Dr. Claude Hitchcock who, at the time, was a surgeon, and ran one of the first primate centers doing research in hyperbaric oxygen, using the monkeys as a research [subject]. And we talked to him and he bought us a hamburger, too.

And after we got done with that, he said, “By the way, you’re accepted for an internship at Minneapolis General Hospital,” as it was called then. Subsequently it’s Hennepin County Medical Center.

Bagby: Well, wait. What do you mean? He knew that you had been? Or he just decided that you had been?

Goodnight: Well, I was a medical student at the time, a third year medical student.

Bagby: Oh, third year. I see.

Goodnight: And he considered that as an interview. But anyway, Dave Gilbert and I took a trip around and we went to a number of different internships in the east, including Minneapolis General Hospital. And we ended up going there. And it was a blood and guts internship, if you will. It was rotating internship. We had emergency medicine, surgery, OB, the whole thing. And rode the ambulances out. In fact, Cecelia used to look forward to seeing me on TV at the ten o’clock news when the ambulance would come out to some horrible car wreck. And “here comes doc”. And we would be working on the patient and you’d feel the hot lights of the TV camera behind your neck as you were working. Anyway, it was quite an experience, and very good training for what was to follow in the army.

Bagby: So it was Hennepin?

Goodnight: It was called Minneapolis General at that time, but it was Hennepin County Medical Center.

Bagby: Right. So you mentioned Dave Gilbert. I guess, were you classmates together here?

Goodnight: I think I first met David playing football in grade school. And then in high school, we became good friends, because we were both studying, interested in medicine and so on. He subsequently went to the University of Washington, and I went to Oregon. But we ended up interning together and then going through the medicine residency together. So still friends today.

Bagby: So and he, of course, was the chief of medicine for many years at Providence.

Goodnight: Yes. And very well-known infectious disease expert.

Bagby: Right.

Goodnight: In fact, he was president of the Infectious Disease Society of America, which is good for someone working out of a private hospital.

Bagby: Yeah. He’s the kind of guy that doesn’t tolerate fools lightly.

Goodnight: No.

Bagby: So then after that, you, that was during Vietnam. And pretty much everyone, including myself, had to go in and do something. You went right after that into the Army. Is that right?

Goodnight: Right. I had applied for the Berry Plan deferment, since I wanted to take an internal medicine residency. But I didn't get it. So I was drafted. During that period in the mid-'60s, they were drafting doctors because there weren't enough volunteering. And at first I ended up at Fitzsimmons General Hospital and [in the] General Medicine Clinic. And I thought how can I be so lucky, I'd have my own clinic practicing medicine. But then the net went out and I got scooped up for Vietnam, which was just ramping up. This would be in 1965, if you'll remember.

So I ended up in a tent hospital up in Qui Nhon, which was the 85<sup>th</sup> Evacuation Hospital. So we actually lived and worked in tents at that time. It was the first [large] hospital to be there.

And then I got caught and sent to the 1<sup>st</sup> Infantry Division, which had a Clearing Company right at the bottom of the Ho Chi Minh Trail. Not a good place to be. So I learned a lot about trauma and surgery and all that kind of stuff there. And then I ended up back in Qui Nhon and then came home after that.

Bagby: So you were there for almost twelve months?

Goodnight: Yes. Mm hmm.

Bagby: After that experience, you then came back to your residency.

Goodnight: Yes. Actually, sort of a funny story. When I was a senior medical student in my little clerk's white coat in the elevator at the university hospital, crowded elevator, and in the back was this tall man. Hair, mustache, severe sort of person. Then he said, "Scott."

I said, "Yes, sir, Dr. Lewis."

He said, "I want you to be my resident."

So I took him up on that with a little interim there with the army. So I became a medical resident and then ultimately chief resident. He asked me to stay on as chief resident after that.

Bagby: So that puts you through so '68 or '69?

Goodnight: '70.

Bagby: '70. And then, then you went to California, right?

Goodnight: Mm hmm.

Bagby: What was it that, tell me about that.

Goodnight: Mm hmm. Well, by then, my interest in hemostasis and thrombosis had been honed quite a lot. Again, thanks to Dr. Seaman and Dr. Kliever. So I decided I wanted to do an academic fellowship with research and with clinical work. And so I took a trip and visited all the famous clotters, half a dozen of them. And I started out down in Los Angeles and I went to Harvard and I went to Michigan and all these places. And the one that influenced me the most was Samuel I. Rapaport and his sidekick Don Feinstein. And terribly bright, wonderful

researchers. And I felt very comfortable in the milieu of USC and LA County Hospital. They sort of fit my M.O. And it turned out to be a wonderful decision. I ended up staying there four years. I was on the faculty for a couple of years after the fellowship.

The first year was a research year. And as rarely happens, all the experiments went perfectly. So Dr. Rapaport said, “Okay, Scott. Send in an abstract to the ASH meeting”, the ASH being the American Society of Hematology. Which happened to be in Puerto Rico that year. The only time it has ever left the United, well, the continental United States.

And as luck would have it, it was selected for the plenary session. And I was terrified. Absolutely terrified. I was number three, I remember. And J. Fraser Mustard, if you remember him, was the president of the society at that time. And he was very kind to me and realized that I was nervous. But I made it through my presentation pretty well, I thought, after practicing it 250 times. The only hitch was Oscar Ratnoff, who was one of the major influences in coagulation at that time, tried to throw me a curve ball that I managed to duck it.

Bagby: He was from New York?

Goodnight: He was in North Carolina.

Bagby: What do you mean, you ducked it?

Goodnight: Well, I fended it off.

Bagby: Oh, you did. So how many people were in attendance, probably, what, eight thousand or so?

Goodnight: There was only about three thousand at that time. And it was partly because it was in Puerto Rico. And as you know now there’s, what, thirty thousand people come to the meeting. Yeah. Mm hmm.

So then onto the clinical years. And of course LA County Hospital was just a hotbed of disease. It had, you know, four or five thousand beds. And patients were coming in and going out all the time. So as a fellow, I had the opportunity to see such an enormous range of hematologic problems and care for them at that time with people like Don Feinstein backing me up.

Bagby: So Don was a pretty accomplished clinician in addition to being a pretty bright guy.

Goodnight: He was famous. When he took the American Board of Internal Medicine exam, he was number one in the country. And he was the perfect clinician. Never forgot anything. And a very kind man, and a good friend even today. He’s something like 86 years old now and he’s still making rounds at USC.

Bagby: Wow. He also had some luck in garnering some support for the division down there, didn’t he?

Goodnight: Uh—

Bagby: Some financial support. He had, some donor gave—

Goodnight: Oh, yeah. No, that's right. One of his patients left him something like 50 million dollars. Which was, of course, very good.

Bagby: Yeah. I'll say. One of the things that everybody here who's ever known you knows about you is that you're one of the best teachers that ever walked on this campus. How did that happen? Did you get that from Don? Or did that just sort of appear?

Goodnight: Well, I came from many directions. First of all, Sam Rapaport was the consummate teacher. And he could give a lecture that would be an absolute work of art. And I learned a lot from him on how to give a lecture. And of course Don Feinstein was a major mentor as well. Because he, too, was a wonderful teacher and got all the teaching awards and so on at USC.

I came to realize that my interests and strengths lay in education and hemostasis and thrombosis. And some lab work with hemostasis and thrombosis. But I had a more clinical bent than some of my colleagues. And so I did a number of research projects which turned out well. But my real love was complex, difficult, challenging problems and bleeding and thrombosis. And so I guess maybe my interest in it sort of came out when one was making rounds or giving lectures. And hence the teaching part.

Bagby: It even spilled over into ASH. Because weren't you involved with the education program at the American Society of Hematology for four or five years?

Goodnight: I was, yeah. I was head of the Education Committee for the society.

Bagby: It's a hard job.

Goodnight: Oh, yeah. We had to organize the educational sessions at each of the national meetings. And I actually chaired some of those, two of those sessions. And participated in many, many others. So it was a pretty rigorous thing. We'd actually publish a book of the lectures that each of the people in the education sessions would give. So you'd have to edit a book as well. And these were very popular in terms of updates of what was happening in hematology.

Bagby: So you're down in LA. And something happened and you showed up in Portland. Fill in the blank.

Goodnight: Right, right. Well. I really wanted to come back to Portland. That's where my family was and my home. So I really wanted to come back. And at the time, the chair of medicine was Dave Bristow, who was my very good friend and climbing partner and so on. He was in cardiology here for a while, and then became chair of medicine. And so I would communicate with him and say, "Dave, how about a job?"

And he'd say, "Sorry. No money. We're in a tight budget crunch and there's no money."

So a year went by and then another year went by. And I was invited up to give a talk in Portland. And I decided to go visit Dr. Seaman. So I went up on the ninth floor of the research building and chatted with Dr. Seaman. And I told him that I'd been offered a job in Portland at another institution. Not that I wanted it. But.

He said, "Don't do anything until you talk to me."

And so I talked to him over the next few weeks. And he said, “You have a job. Show up on July first and you can go to work.”

So I was writing a paper with Sam Rapaport, and my family had come up earlier. So I ended up driving almost straight through from Los Angeles to Portland. I was exhausted. I got in at three in the morning. Slept a few hours. And at ten o’clock, I called up Dr. Seaman. I said, “Well, here I am, Dr. Seaman.”

He said, “Come to the office immediately.”

So I did. And he took me out to his house on Patton Road, which was a huge mansion. Beautiful house. A Trailblazer bought it, actually, later. And we sat down and he poured a Brown Derby beer, which was the cheapest beer you could buy. And we sat across the chess table and he looked me in the eye and he said Scott, “I’m going to tell you something that you must tell no one, not even your wife.”

I said, “Well, yes, Dr. Seaman. What is it?”

He said, “I’m going to disappear.”

I said, “Disappear?”

And indeed, on that Friday, he picked up his briefcase, put on his coat, said goodbye to the secretary, said goodbye to the people in the lab, and walked out, never to return.

But he was found, I’ll jump ahead, some eight or ten years later by Sherrill Slichter, who is the head of transfusion medicine up at the University of Washington. She found him in a bookstore in Freeland, Washington.

Bagby: Which he owned, right?

Goodnight: Which he owned. And he had his wife there, Emily. Who had the yarn shop and so on with it. And his long-time tech, Char, was there as well, running the framing studio and keeping track of everything, just like she did [in his lab].

Bagby: At his laboratory.

Goodnight: At the lab. Mm hmm.

Bagby: Wow. And so that was his way, so you swapped, he gave you his position, in a way.

Goodnight: Exactly. You’ve got it. He gave me his salary, gave me his lab, gave me his patients. He gave me all his obligations. I was suddenly overwhelmed. Here was this lab, he used to do research with cows. He would go out to the slaughter house and bring in a cow to the research building. A whole cow.

Bagby: A whole cow?

Goodnight: A whole cow.

Bagby: I thought it was the eyes that he was using.

Goodnight: But he would also get an eye and he would mount the eye on a microscope that would look through the lens of the eye. And then he would put a catheter in the cow’s carotid

artery. And he'd run the catheter into the ophthalmic artery at the eye. Then he had a side port and he could inject chemicals into the vasculature of the eye that way. So like ADP or epinephrine or platelet antibodies or whatever. And then he could visualize what happened in the micro-circulation of the eye.

Bagby: Where was the cow?

Goodnight: Right there in the room.

Bagby: On the third floor of the—

Goodnight: Ninth floor.

Bagby: On the ninth floor?

Goodnight: Ninth floor. He would take it up in the elevator.

Bagby: How did it get up there?

Goodnight: He would go up in the elevator with the cow. And he would lead the cow. And I'd sit there and watch him. And he had something like thirty freezers filled with frozen cow eyes. And movie film. Because he would take movies of all of this. So I was left with this.

Finally after a year I figured well, he really isn't coming back. So I got rid of all of that. So I kept the secretary and swapped out the lab techs and was on my own.

But then he was doing a big study with Dr. Griswold and Dr. Rosch and Dotter where they were treating patients with myocardial infarctions with oral anticoagulants, with warfarin. And it was a double-blinded, randomized, controlled study. So he had several hundred patients who were taking Coumadin. And they would show up every day, whenever they wanted, and had their prothrombin times drawn.

Bagby: In your lab?

Goodnight: In the lab up there. And so after he left, you know, "knock knock" on the door. "Well, I'm here for my pro time. Where's Dr. Seaman?"

"Well, he's disappeared."

"That's impossible. He would have told me."

So anyway, I had to deal with that. And that led to the starting of the oral anti-coagulation clinic. Which was one of the first ones in the country, actually, that we started, in order to take care of this group of patients.

Bagby: When did the coag studies transition to clinical pathology? Was that a lot later?

Goodnight: The coagulation lab?

Bagby: Yeah, the coagulation lab.

Goodnight: Well, as soon as I arrived, we expanded the lab to do clinical testing of hemostasis and thrombotic disorders. Putting in new tests and so on. And after running it up there at the research building for about four years, it began to make more sense to move the laboratory under the aegis of the laboratory medicine group, the clinical pathology group. And it also helped with funding. So after about four years, it actually became part of pathology.

Bagby: So that was pretty fast. That's good.

Goodnight: The lab turned out to be a real resource for me and for the region, actually, or more. Because we could do all of the important diagnostic laboratory tests. And this was a period of time when we were learning more and more about thrombotic disorders, and all of the abnormalities, of which there were like a dozen that could lead to a propensity for thrombosis. And so we would get referrals in, both patients and blood, from the whole area. From the western United States, really. So it became a very active thing. We had like four or five technologists working at any one time doing these tests.

Bagby: I remember after coming here and talking to you, using the word *Østerud* a lot. Bjarne Østerud. Did he ever come to Portland?

Goodnight: No, he never did. I worked with him for a year down at University of Southern California. He was a Norwegian biochemist and was a great friend of Sam Rapaport's. And the two of them did a lot of research together. Bjarne was from Tromso, which is the most northern medical school in the world, way up at the top of Norway. He spent his career up there. And I actually had the opportunity to go give some talks at the Scandinavian coagulation meetings that happened to be held there one year. And visited with him there.

Bagby: But he'd never come here. He just sort of influenced you.

Goodnight: Well, yeah. And we worked together and did some studies together, actually.

Bagby: So when Dave Bristow realized that Art was gone, he had a hole, Art, wasn't Art the division head...

Goodnight: Right. Remember the history, which you probably do better than I. Edwin E. Osgood was here and had what was called the Division of Experimental Medicine, which was basically hematology and bone marrow research and so on. And he recruited a number of people to work with him, including Art Seaman, Bernie Pirofsky, Bob Mass, Bob Koler and Bob Bigley are the ones that I remember. And ultimately, after maybe quite a long time, Dr. Osgood resigned as head of the Division of Experimental Medicine. And Dr. Lewis, who was chair of medicine at that time, had to deal with all these young researchers, clinicians. What was he going to do with them? So his solution was to appoint Dr. Seaman as head of hematology, Dr. Pirofsky as head of immunology, Dr. Koler and [Dr.] Bigley as heads of—

Bagby: Genetics.

Goodnight: --medical genetics. Dr. Mass as head of the VA Hematology Service and, who am I forgetting? But anyway, that was the origin of the Division of Hematology.

And then, when Dr. Seaman, Dr. Seaman was planning this exodus for a long time, I think. And he had recruited a hematologist from the Mayo Clinic by the name of James Linman. Well, who was interested in bone marrow morphology and bone marrow function, and had written a major textbook of hematology.

So Dr. Linman came and was there. And after Seaman disappeared, Dave Bristow appointed Jim Linman as head of the Division of Hematology.

So he was there, which was good for me, because I could do all the things I had to do as a young faculty member. For about three years. And at that time, Dave Bristow decided that he would seek his fortune down at University of San Francisco, at UCSF, as head of cardiology down there. So he left. And after several years, George Porter was appointed head of the Department of Medicine. And it turned out that George really didn't care for Dr. Linman. And the first thing he did when he became chair of medicine was to call Dr. Linman in and tell him that he was no longer head of the division. Which was somewhat brutal, I must say. And the second thing he did was call me in and say, "Would you mind taking over the division for a while?" So that's how I ended up first as an interim and then head of the hematology division.

Bagby: There was another hematologist, sort of hem-onc person in the division. A young guy named Bob Goldman.

Goodnight: That's who I forgot. Yeah.

Bagby: And he, because he was interested in leukemia, he for me was an important figure. But he left during Linman's tenure, I think, and went into practice at Saint V.'s. Do you remember that period of time? Or did you have enough experience with Bob that you knew him well enough?

Goodnight: I knew him quite well, actually, because my office was just across from his office up on the top floor of the clinic building. And so I would go in and chat with him.

As a resident, I had a patient, a young man who had worked up at Hanford in the summers. And he came down first with thyroid cancer, then he came down with chronic granulocytic leukemia. And Bob sort of mentored me while I took care of him during that time. So I got to know Bob very well. Wonderful guy.

Bagby: He was, I think, leaving was a loss to the division. I think he was a good teacher and very compassionate.

Goodnight: Absolutely.

Bagby: Caring about his patients. There was one other question I wanted to ask, and it had to do with—so you, after Linman stepped down or whatever—

Goodnight: Was stepped down.

Bagby: Yeah. Was knocked down. You took over for a period of three or four years.

Goodnight: No, it ended up being like eight years.

Bagby: Yeah. That's more like what I remember.

Goodnight: Yeah. Those were sort of the halcyon days. It was really fun. Wonderful faculty that were there. And the house officers and the fellows and we really started with almost nothing. You were there, I believe, from '72 to '76, I believe. But you were in the lab as a fellow. And so who did we have to make rounds, you know? Dr. Linman left. So it was the Bobs and me. The Bobs being Bob Koler and Bob Bigley from medical genetics, who kindly stepped in and made rounds. And Bob Mass over at the VA. So it was a busy time. It was a very busy time.

Bagby: So it was when the students started getting interested in heme, too, because hem-onc was getting the sophomore prize, pretty much. Pretty consistently during your tenure.

Goodnight: What I did was shamelessly steal the blood course from USC that Don Feinstein and Sam Rapaport had created, and moved it to the year two here at Oregon. And it was sort of a combination of lectures and small group sections and laboratories. But, and I was the head of the hematology teaching committee for a dozen years or so in there. And we really tried to make it a wonderful course. And I think mostly we succeeded. So we carefully created patient problems that the students would have to go through. The lectures were monitored. And if people weren't up to snuff, they were moved out and someone else was moved in. And even the tests, we'd go through the tests, and every question until we thought we had them just right. And then after the students took the test, we would run a computer program to see in a given question whether the top ten percent of students got it right or wrong. And that way we could identify those questions which were not discriminatory. And we would throw them out. And in addition, the students could write notes to us and say, "I don't understand this question," or "I think this is an unfair question." And we would respond to each and every one of those.

And I think that sort of hands-on approach sort of paid off so that the blood course then, and from what I understand from Tom Deloughery is still getting the prize almost every year since then.

Bagby: Yeah. So that brings us to the day you stopped being division head. And how did that evolve where you made this transition into laboratory, into clinical pathology?

Goodnight: Well, when we started it was a pure hematology division, really, after Dr. Goldman left. There was nobody there to do any oncology at all. And the surgeons were doing the oncology. Bill Fletcher and others were giving chemotherapy, such as it was in those days. It was like nitrogen mustard. And as we recruited people to fill in the slots, it became more and more clear that we needed to develop oncology. And here I am, a pure hematologist interested in thrombosis and hemostasis. And after that, as the eight years went by and the division was building up, it became absolutely clear to me that if the division was going to flourish, we were going to have to add oncology. A shift toward oncology. And if I was going to flourish, I wanted to shift towards hemostasis and thrombosis, because I had quite an operation going at that time with clinics and labs and patients and all the rest.

And so I decided to move over to pathology but maintain my appointment in Department of Medicine and Hematology. And then some young fellow doing research on bone marrow function was recruited to be the head of the division, i.e., Grover Bagby.

Bagby: But that really liberated you from all the administrative headache of building an oncological wing.

Goodnight: Exactly.

Bagby: And I guess one of the first people in that position was Bruce Dana, wasn't it?

Goodnight: Bruce Dana came from Arizona. Wonderful clinician. And some of the other people were Jeff Lawrence [who] came [to us].

Bagby: Paul Wallace.

Goodnight: Pardon?

Bagby: Paul Wallace.

Goodnight: Paul Wallace.

Bagby: Gerry Segal.

Goodnight: Gerry Segal.

Bagby: Right.

Goodnight: Paul Wallace has gone onto, he sort of imprinted on Marshall Lichtman, who was his lab director back at Rochester, New York. So Paul tried to be a bone marrow researcher, or white cell researcher it was, I guess, like his mentor. But his heart just wasn't in it. He was really more into clinical decision making and so on. And after a few years, he left feeling badly. Went to Kaiser. And now has become one of the gurus in the country for clinical decision making and clinical paradigms, and is the chair of a company back east now. He worked with Kaiser for many years and he worked at the Mayo Clinic. And now he's back at, somewhere in the east. I think Rochester, again.

Bagby: Oh, really? I didn't know that.

Goodnight: Yeah.

Bagby: I'll be darned.

Goodnight: And Jeff Lawrence went on into academic medicine. Bruce went into practice, which was his real forte, as did Gerry Segal.

Bagby: Yeah, Jeff's done well. He went to UCSF and started looking at genetic basis of leukemias and differentiation of cells. So he's done well. He lives in the Bay Area. I thought that Paul as in the Bay Area, but—

Goodnight: He was. He was at Kaiser here, but then he went to central Kaiser in Oakland, in the Bay Area. And then he was with them for twenty years or so. And then he moved on back east.

Bagby: So since you left, sorry. How long were you in Clin Path then?

Goodnight: I was probably in pathology for another ten years or so. Something like that. Basically doing all hemostasis and thrombosis, all the time.

Bagby: And then you retired. And completely retired, which people like Jim George approach me almost every ASH and say, "I can't believe Scott just stopped." They couldn't believe that you just walked away and didn't sort of hang on and do things. Do you, obviously you're happy having done that.

Goodnight: There's sort of a, several things all came together. First of all, I had shifted more into some administration. Joe Bloom recruited me to be an associate dean, which I did for several years, along with Ed Everts. So that was the trio in the School of Medicine. I was supposedly the associate dean for program development. But what I really was was a fireman. Joe would say, "Scott, there's a fire over in the Department of Microbiology. Go and put it out." "Scott, go over to biochemistry and tell an unnamed faculty member to get a life. Go out to the Primate Center and tell them to quit being so arrogant." Okay....

So anyway, it was fun doing that. And I loved Joe Bloom and had a wonderful time. But then, after two or three years, it so happened that Ed Everts was going to retire, and Joe Bloom was talking retirement. And I was there. So we're sitting, we're in these offices right next to [each other], we kept talking. And then the state offered an early retirement package, which was quite attractive.

Meanwhile I had the, I was channeling Dr. Seaman, who chased the bluebird of happiness. And Tom Deloughery had worked with me for many years. Tom was just a wonderful clinician and academic. He taught me everything I know. Anyway, he could easily step in and do all the things that I was doing. So that was covered. I wouldn't be leaving anything [uncovered].

And I decided that maybe it was time. In hemostasis/thrombosis, it went through sort of an interesting sequence. When I got into it, it was, we didn't know anything about bleeding and clotting and the disorders, and how the coagulation mechanism worked, and how platelets worked and so on. Platelet vascular interactions. But during my career, the knowledge base just roared upward. And I got to be part of that with all the thrombotic disorders, proteins, activated protein C resistance and so on. And all the bleeding disorders, and the multiple variants of Von Willebrand disease and so on.

But by the end of my time in the lab there, it sort of plateaued out, and nothing much was happening. There were no new anticoagulants. We identified all the thrombotic disorders. We had hemophilia pretty much treated now. So things had kind of stalled out. And that may have played a role as well.

So I decided hey, while I'm still young enough, I'm going to jump over the fence and see what other roads through the forest there are. Because I'd been working in medicine, you know,

right through from college on without any breaks. Nowadays everybody takes a year or two break here and there. But I didn't. So I did. Haven't regretted it. It's been fun.

Bagby: So you went first to Mosier, right?

Goodnight: Mm hmm.

Bagby: And had a place in Mosier. But then moved to, more recently, to Hood River.

Goodnight: Right. Well, after I retired, we thought that we wouldn't do anything for a year. We would just kind of see what came about. And my wife Cecelia's parents had a house up in Hood River. They had passed away but we had kept the house. And so we went up there to spend a week. We'd never spent more than a day or two during my working career. And she immediately had to go back to Portland to do some teaching, what she was doing. So I was left there alone. Big mistake. I ended up picking up a brochure at the grocery store of real estate that was being offered, including a twenty-acre piece out in Mosier. And I ended up buying it.

So we ended up moving to Mosier and doing some peach farming. We grew organic peaches and sold them at the farmers' markets and so on.

But after ten, eleven years of that, it got to be a lot of work. So we thought we'd just get a small house in Hood River without any yard. And the only thing we got right was that we got a house in Hood River. But it turned out to include an acre and a half of blueberries, organic blueberries. So now I'm a part-time blueberry farmer as well.

Bagby: Is that less strenuous than peaches?

Goodnight: Yes, because you don't need ladders with blueberries.

Bagby: Oh.

Goodnight: Mm hmm. So we take part in the farmers' markets, and a group called Gorge Grown, which is a sort of farm to table operation that's very active in the Columbia Gorge.

And then I some years ago took up tutoring. There's a program with Columbia Gorge Community College called Gorge Literacy. And as part of that, they have tutoring for people who are [non] English speakers of other, or of other languages. So I've had a series of tutees who have been fascinating. One was a nurse from Lebanon, so I learned all about Islam and Lebanon and the Middle East from her. Then there was a young woman from southern China who came from a tiny village in China. Which has been fascinating. And then just last week I started working with a musician, a twenty-eight-year-old clarinetist from South Korea who has moved here to marry a fellow in The Dalles. So I'm well on my way to learning a lot about Korea as well.

I was actually a visiting professor in Korea at one time. So it kind of sparked my interest in that.

Bagby: Where do you meet these guys? And is it about the language mostly?

Goodnight: It's language, yeah. And reading, writing, speaking, hearing. I meet them either at the libraries in The Dalles or Hood River or in the community college, in study rooms there. And we go twice a week for an hour and a half. And there's usually some, couple hours of preparation if you really want to do a good job. It's fun.

Bagby: So you still, you haven't retired. You're still teaching.

Goodnight: Yeah, well.

Bagby: Well, I'll tell Jim when he asks me next, in Orlando this December, I'll tell him that you're still teaching.

Goodnight: Still teaching. Yeah.

Bagby: That's cool. So I'm supposed to ask about your perception of the changes that have occurred at OHSU from the time you set foot here as a student to now. Why don't you comment on that?

Goodnight: Well, maybe a few things. When I came here as a student, this was a very sleepy place. I mean, Dr. Lewis was there in medicine. And then Dr. Krippaehne, well, actually Dr. Dunphy was there before Dr. Krippaehne became head of surgery. But there were relatively few faculty members, relatively little research. It was very much a clinical operation to train doctors for the community.

But things started to heat up over the years. And I'm not sure who gets all the credit for that. Certainly Peter Kohler gets a lot of credit. Dr. Laster, although a bit controversial, also, a lot of good things happened on his watch. You came here, which was a great thing. At the time, just another research fellow. But you went ahead and applied for and built the first cancer center here, and built that on up. Then you transferred it to, the head of it to Brian Druker, which is, I don't know. When we started out in hematology, we had maybe one or two faculty members fulltime. And now, how many faculty members are just in the Knight Cancer Center alone? Hundreds.

Bagby: Yeah. A lot.

Goodnight: Yeah.

Bagby: I don't know.

Goodnight: So that built up. Dr. Laster worked with Senator Hatfield, who actually arranged for the money for this building we're sitting in. The BICC, the Biomedical Information Communication Center. And Laster asked me to be the head of a faculty advisory committee as to help decide what this was going to look like. And it was quite controversial at the time, because they thought well, this should be a library of the twenty-first century. And it shouldn't have any books in it. It should be all digital. Which, if you take us back into the '80s or whenever it was, I mean, that was heresy. I mean, we were still coming to the Index Medicus. Thumbing through each month, trying to find articles that we were interested in.

So anyway, it went on to become [a reality], it got built and we recruited Bob Beck, who was the first chair of it. And really has become a jewel in the crown here in terms of education research.

So that was part of it. I think the curriculum pretty much has stayed the same for many years. And then how many years ago, three or four years ago, they developed a new curriculum here, which I really don't know much about. But I hope there's a big improvement.

Bagby: Yeah. I'm less familiar than I should be as well. But it turns out that part of the deal is the students are getting into clinical situations earlier. That is, exposed to clinical situations earlier. But that's about all I know. There's been some consolidation of concepts, so that some aspects of cardiovascular and hemostasis and especially thrombosis will occur together. But I'm really not—

Goodnight: It's something I worry about a little bit, is that the students of today on up often are a person or two removed from the patient. They're not thrown right in with the patient. There's always the faculty attending, seeing the patient. And the private clinics and so on. Back in our day, one was tossed in and told, I remember when I started my first day of internship, the resident came to me and said, "Hi, Scott. Glad to meet you. This is your ward. There are thirty-five patients on it. And I'm going on vacation. Goodbye." Whoa.

So in the military, too, you were thrown right in. nobody between you and the patient. So I don't know how it's going these days. But I'm a little worried that the student isn't really challenged as much to take care of the patients. Probably the patients get better care [than] during that time. But I'm not sure the ultimate education of the physician is in the hands.

Bagby: So there's a lot of change in the work hours as well. There's some constraints on how long residents can actually work. That's proven to be pretty controversial now as well. It's a tough, it's a tough balance.

Goodnight: It is.

Bagby: Do you want somebody who hasn't had any sleep for forty-eight hours or not? And if not, what about the hand-off syndrome? Residents will take off at noontime because their hours are up. And they hand off their patient to somebody else. So these hand-off things are challenges, too. I don't know what the solution is.

Goodnight: Yeah, back in the day, you know, every other night and so on. Now you're right. I guess if a surgery is going on and time is up for the resident, they just scrub out and leave.

Bagby: My bet is that that doesn't happen. Surgeons know that they, surgeon trainees want to be in the operating room. So I'm glad I don't have to figure it out. I've been retired. These, the other changes that in practice or things that you want to close with? Because I'm out of questions.

Goodnight: Well I always insisted all through my career to involve fellows or residents or students whenever I had any patient interactions. So, which I was able to do in all my clinics. Although it slows you down, there's no question about it. And the emphasis on income generation toward the end of my career and I'm sure now even more, just doesn't have room for

that anymore. Some of the faculty members have their own clinics and they work them through just like they do downtown, you know, the private hospitals. So anyway, that may be good for everybody, but it wasn't that good for me. I didn't enjoy that as much as to be able to teach as I went.

Bagby: I recall that the hemophilia clinic was a pretty important operation for our community. Tell me about how that started and what the relationship with CDRC was, and that kind of thing.

Goodnight: Well the hemophilia clinic initially was a pediatric operation. Since most of the patients were young, the older ones had died from bleeding or whatever cause. And it was amalgamated into the CDRC, the Child Development Rehabilitation Center. And Dr. Everett Lovrein was the director of it.

When we first started out treating hemophilia, it was such a challenge, because we didn't have any concentrates of the missing clotting factor. So the only way to replace the factor eight or factor nine that was missing in these individuals was to infuse fresh frozen plasma. But if you think about what the plasma volume in a person is, it's about 2.5 liters. And if you want to get the level up to 50 percent, then you've got to give 2.5 liters of fresh frozen plasma that has 100 percent [of a clotting factor].

But the half-life of these clotting factors are measured in a few hours. So you've got to get more plasma. And more plasma, and the patients would go into heart failure. And then the bleeding would start again.

So the big thing that happened was they first found cryoprecipitate, which contains fibrinogen and factor VIII. You basically take plasma, you freeze it. It starts to thaw. You take off the liquid, leaving the ice crystals behind that contain the factor VIII. And then you could then give clotting factor VIII in small volumes and raise the levels to normal. And you could do surgery, you could treat head bleeds, you could do all kinds of things.

And then after that, they learned how to freeze dry the clotting factor. And then they learned how to purify it and freeze dry it. And then they learned how to make it by genetic means.

So all of this revolutionized the care of hemophilia. And so this clinic, and the CDRC was a multidisciplinary clinic. So they would have hemophilia dentists, hemophilia orthopedists, hemophilia occupational therapists, hemophilia psychologists, and so on, to treat these boys.

So I helped out there. I wasn't, I would go to clinic there. But Ev Loverein was the director.

Well as time went on, as they made these blood products, unfortunately they were contaminated with viruses. And the viruses of hepatitis B, and non-A, non-B hepatitis, and then ultimately the HIV virus. And as a tragedy, triumph turned to tragedy, I guess you could say. Because now you could stop bleeding and prevent bleeding prophylactically in these subjects. But they were infected with the viruses.

Ultimately, they were able to purify the concentrates and rid them of the HIV virus and the hepatitis virus. So we're back online again now treating these patients. They've actually developed long-acting factor VIII preparations, for example. So the care of hemophilia has changed a great deal.

But back to your question. The hemophilia clinic was a great resource during those years for patients with hemophilia.

Bagby: How was that funded, the hemophilia clinic?

Goodnight: The hemophilia clinic was originally funded through the CDRC. But another source of funding, which is really crass, really. But the companies would make these concentrates. And they were very expensive. And so the CDRC would buy these concentrates at a discount and then resell them to the patients, which would then pay for them through their insurance or through Oregon Health Plan or whatever coverage they had. So there was a profit that was made in the buying and reselling of the concentrates.

Bagby: And that fed the staffing—

Goodnight: And that fed the staffing. It's sort of like what happened in oncology. The oncology group practices would buy chemotherapy agents at a discount, in bulk. And then they'd turn around and sell them to the patients, and then make a profit on it.

Bagby: Maybe a little different in that it's not being poured back into the staffing issue.

Goodnight: Right.

Bagby: So when, did Ev start that clinic before you came back? Or was it after you arrived?

Goodnight: I think it was started before, just before I returned. Because I started working in the clinic almost immediately after that. So it was ongoing. There were only a small number of patients. And then the numbers increased as the treatment improved. And then the numbers decreased again because of the HIV and the hepatitis and how they're increasing again.

Bagby: So one of the things that you were involved with that might have originated in Norway, but tell me if it's true, because it also fits with the Northwest. And that is your work with fish oil and hemostasis.

Goodnight: Yes. Well, Bill Connor was a very well-known lipid researcher here. And I became aware that some Danes, actually, not Norwegians, went to Greenland and studied the Greenland Eskimos, who ate a diet almost entirely composed of fish, seal and whale. No vegetables. No fruits. Just fish. And at the time, people had realized that fish oil contains a unique kind of fatty acid that is twenty carbons long but has the first double bond at the third bond from the end of the molecule. And it's called Omega-3 fatty acids. And these produce a different kind of prostaglandin in platelets and endothelial cells.

Anyway, Jorn Dyerberg and Bang drew blood from these Eskimos and discovered that their blood and platelets, red cells, were loaded with these Omega-3 fatty acids. And they also determined that they had a lower rate of heart attack and stroke. And so that instigated a huge amount of research on the effects of eating fish or fish oil or purified Omega-3 fatty acids on atherosclerosis, platelet function, platelet vascular interactions, thrombosis, and bleeding.

So this was just happening when I arrived and I met Dr. Connor. So we did some studies where we would take volunteers and feed them large amounts of fish oil for a period of time. And then we'd have a washout and then we'd feed them [oils that were] not fish oil. And we would measure various functions. And we learned that the Omega-3 fatty acids were

incorporated into all sorts of cells, including platelets. That the platelet function was inhibited, bleeding times were prolonged. Sometimes platelet counts were reduced. And over time, people did a myriad of studies trying to show that eating fish or fish oil was indeed protective against heart attack and stroke. In fact I read just recently that the most common nutritional supplement taken in America today, that something like 15 percent of people take fish oil every day in hopes that it will protect them. But the truth is, there's really no hard evidence that taking fish oil protects against heart attack and stroke. It may be eating fish a time or two a week is good for you. But again, there's no good controlled trials to show that it works. So anyway, we did studies like that for a number of years.

I just read an article recently where some investigators looked at the Inuits, the Eskimos, and discovered that they had some genetic variations that are only found in Eskimos, that are related to the enzymes that alter fatty acids, or break them down. And indeed, and Europeans don't have these variations. And the Eskimos were in fact, on average, shorter, and lighter weight than other people. So the thought is that maybe the reduction of heart attack and stroke in the Eskimos is related more to a genetic abnormality than it is to, directly to eating fish.

Bagby: Isn't there some information on populations that have three fish meals a week versus none that's suggestive? I know that fish and fish oil isn't the same.

Goodnight: Yeah. There's lots of population studies that are suggestive and so on. But when people get down and do rigorous, controlled, blinded trials, it hasn't panned out. Now there is a huge study that Joanne Manson at Harvard is running now with some 26,000 people. And they're feeding them fish, Omega-3 fatty acids and so on. And this could be, and they followed them for fifteen years, a long time. So this could be, give us an answer. Because they do very good work.

Bagby: Okay. Well, thanks so much for coming in. I've enjoyed our conversation and look forward to our lunch.

Goodnight: Well, thank you.

**[End Interview.]**