Episode 40: Leading with 110%
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Dr. Rubin: Hello, and welcome to "Taking the Lead," a podcast from the Radiology Leadership Institute that profiles radiologists as leaders, seeking insight and inspiration from a variety of perspectives and experiences. I'm Geoff Rubin. Today, I am speaking with Sarah Donaldson, the Catherine and Howard Avery Professor Emeritus of Radiation Oncology and director of the mentoring program in the Department of Radiation Oncology at the Stanford University School of Medicine.

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After attaining a nursing degree at the University of Oregon, Dr. Donaldson was inspired by her mentor to pursue a career as a physician. She was one of just six women in her class at Harvard Medical School before training and joining the faculty in radiation oncology at Stanford University where she recently completed 52 continuous years as a member of the Stanford community. A passionate mentor and pioneer in both pediatric and adult radiation oncology, Sarah has been recognized with the Marie Curie Award of the American Association for Women Radiologists, the Janeway Medal of the American Radium Society, and the Elizabeth Blackwell Award of the American Medical Women's Association.

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She's a gold medalist of the del Regato Foundation, the American College of Radiology, the American Society of Therapeutic Radiology and Oncology or ASTRO, and the Radiological Society of North America. She's a former president and the first female president of both the American Board of Radiology and ASTRO. She is also prior president of the RSNA. Highly committed to community service, Sarah elevates every organization that she touches with infectious enthusiasm and optimism.

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Sarah, welcome.

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Dr. Donaldson: Thank you, Geoff. What a privilege it is to be here today.

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Dr. Rubin: You were born and raised in Portland, Oregon. What was your family life like growing up?

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Dr. Donaldson: I grew up largely with a single mother. I was three when my father left our home. And fortunate for me, my cousins lived three houses away. And so I grew up with my two cousins very much like siblings because when my mother went off to work, I went to my aunt and uncle's house and then went to school with my cousins and I played with them and I grew up not so much having all the issues that come up to a single child because my two cousins were like siblings to me.

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Dr. Rubin: Wow. That's a fantastic opportunity to have them close by. And do you remain close today?

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Dr. Donaldson: Well, the three of us were like three musketeers. We did everything together for many, many years. Unfortunately, they've both passed away, and so now I'm the senior member of the family and their children are like my children. They've always called me Aunt Sarah and their children's children give me the same gratifications that grandchildren give every other grandparent. And so in many respects, I've been rewarded of having a huge, wonderful family that a lot of single children don't have.

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Dr. Rubin: Your mother must have been a tremendous influence on you growing up. Can you speak a little bit about what she did and how she influenced you to excel in the way that you have?

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Dr. Donaldson: My mother was a very strong woman and I grew up largely during the war. And so life was very difficult at that time. And my mother went off to work every day. She worked at a company called WP Fuller and Company which sold paint, and wallpaper, and household goods. My mother had a college education and she worked as a bookkeeper. And she taught me from the very beginning that one needed to work hard and work hard to be able to take care of themselves. The lesson I can remember over and over again is that I always needed to be able to take care of myself. So it was instilled upon

me all throughout school that I needed to go to school and I needed to do well because I needed to be able to look out for myself should I need to, which certainly was a reflection of what she had gone through. She was a very frugal lady and we got along. I had a very happy childhood. I have nothing but happy memories about growing up.

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Dr. Rubin: You mentioned you grew up during the war. Which war was that?

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Dr. Donaldson: It was World War II.

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Dr. Rubin: That was the war. Yes. With your mom, a professional and pursuing work outside the home, did you start working at an early age yourself? Did you have any jobs that you can recall from childhood?

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Dr. Donaldson: Oh, yes. I had lots of jobs. I had several non-paying jobs. When I was young, I went off to summer camp every summer. I was something called a campfire girl. I was a Bluebird and then I was a campfire girl, sort of analogous to girl scouts. And I did that all through school. One summer I worked as a dishwasher until I could be a counselor and then I was a camp counselor. So that's what I remember about my first jobs which were non-paying jobs but they were fun jobs and it taught me a lot about outdoor living, and camping, and having a good time and all that.

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When I was in high school, I started working as a candy striper in a local hospital in Portland called Multnomah County Hospital. It was a big county hospital of our region. And I worked as a candy striper until I was old enough to get a work permit. And then I worked as a nurse's aide and I did nurses aid work on Saturdays and Sundays. This was like doing community service. And I flourished in that. So it wasn't unusual when it was time to decide what to do for, you know, a lifetime profession. My selection was pretty easy because growing up at that time, there were really three choices for girls if they wanted to go into school, could be a school teacher, or a secretary, or a nurse. And a few people chose library science, but those were the three main areas. And so I, of course, wanted to be a nurse because I grew up working in the hospital and I

was very comfortable. I learned a lot about life. I learned a lot about medicine. I learned how to take care of myself. And so I grew up knowing that I was going to be a nurse.

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Dr. Rubin: And what inspired you to pursue work in the hospital in the first place given that your mom was not particularly in healthcare?

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Dr. Donaldson: Yeah. I don't remember that except for my best friend, Nancy, and I both decided we wanted to do it. So I suppose it was one of those things that two curious young girls decided they wanted to do. I can't remember that. I can remember Nancy's mother and my mother were quite good friends and they didn't resist us doing it. I wore a little blue and white striped seersucker pinafore. I can remember my uniform, but I can't remember why I was so interested in doing this.

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Dr. Rubin: Can you recall any interactions from those early days in the hospital that really gave you the confidence that nursing was the direction for you to pursue at that time?

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Dr. Donaldson: I loved working in the hospital and it gave me a lot of responsibility and I learned how to do things like make beds and do simple procedures and as I got better and better, people taught me how to change dressings and how to help people get out of bed into their wheelchair and how to feed patients and how to talk to them. I just felt very, very, very comfortable in that environment. I think it was a caring environment and I was given responsibility. And so, you know, when I was old enough to actually be employed, then I could write in their charts. This was, you know, before the computer, but I could enter temperatures and pulses and do blood pressures and write them down and weigh patients and record how much they had to eat and all of those kinds of things. And I felt very official doing it and I was very precise and attentive and detail-oriented, wore a smile and was happy doing my job. I just came alive in the hospital.

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Dr. Rubin: When you think back to your years in high school, in particular, and such, is it those times in the hospital that are the most memorable to you, or were there other things that you pursued outside of high school that were also rewarding to you, extracurricular activities, sports?

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Dr. Donaldson: Well, in high school, I specialized in socialization. I said yes to every committee and every opportunity I signed up for. So I was like editor of the school newspaper, and I was a cheerleader, and I was a class officer and it was very important to be on the honor roll. And I was on the honor roll. I wanted to do everything that there was to do. And I did that in spades. I seemed to have boundless energy. I don't know where all this energy came from, but it was pretty channeled into doing things that were rewarding and gratifying because my mother made it very clear that if I wanted to go to college I had to make good grades and that meant I had to study, and I had to do my homework, and I had to iron my clothes. She taught me what I needed to do to take care of myself. My mother was really a strong woman.

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Dr. Rubin: You sound like you were a very industrious young woman growing up. And it sounds like your mother was very industrious as well and that that was a characteristic that you ultimately really emulated even though you pursued different avenues for that industriousness. So you began college at the University of Oregon in Eugene and then after two years, completed another three years in the University of Oregon School of Nursing earning your bachelor's and your RN degrees. Was five years the norm for a nursing degree when you went to college?

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Dr. Donaldson: It was if you wanted two degrees. You could go to nursing school and just get an RN degree and not a Bachelor of Science degree. But I was very interested in going to college. I didn't know enough, Geoff, to know the difference. I just knew I wanted to go to college, I wanted to pledge a sorority, I wanted to go to football games, and I wanted to do all the things that kids like to do when they go to college. And people from Portland that went to a state school went to either University of Oregon in Eugene or Oregon State in Corvallis and half of the class went one place and half the class went to the other. I chose the University of Oregon mainly because that's where my friends went to school.

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Dr. Rubin: So it's a rational choice. Now, I noticed that you were recognized as student nurse of the year in the year that you graduated. What led to that honor, to your selection?

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Dr. Donaldson: Well, I believe I was just selected. I don't remember it being a contest. I think I was selected for that. And it was kind of a big deal because there were seven schools of nursing in Portland and each school of nursing had a candidate. So I was one of seven nominees and I was selected. And so that meant that I was sent by the state of Oregon to the nurses' convention of the year and that was in Miami. I'd never been outta the state of Oregon at that time. So it was my first airplane trip flying to Miami for this convention of student nurses. It was really quite a distinguished honor for me. I had a very good time.

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Dr. Rubin: Clearly you distinguished yourself during nursing school. Did you pursue any leadership or extracurricular activities while at obtain your nursing degree?

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Dr. Donaldson: I was a class officer. So I guess the answer to that is yes, but I don't remember those aspects going to nursing school. For me, I couldn't get enough of nurse nursing school, I loved nursing school and I loved all the things that were associated with nursing school. And at that time at the University of Oregon, now called Oregon Health Sciences Center, the nursing students and the medical students were kind of one big cohort. So we kind of all grew up together and we went through rotations together and such. So the people in my nursing class became very integrated with the people that were in the same class. And so we did things as a unit and we became very, very good friends. We went skiing together on weekends and we had parties and we had occasions for celebratory events and there were quite a few marriages that came out of the girls in the nursing school that married medical students in that same class. And I'm still very, very good friends with many of those people that have gone on to have stellar careers, and many of who you will know as well, notable physicians and radiologists. But I knew them when I was a nursing student.

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Dr. Rubin: Yeah. Wow. Now, obviously, it's no secret that you became a physician yourself. And the question I wanna ask you is that during those early engagements as a nursing student, mixing it up with the medical students, did you have an inkling at that moment, "Maybe I should be in medical school or..." Talk a little bit about what your perspective was at that point in time about the relationship of nurses and physicians in your satisfaction with being on the nursing side.

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Dr. Donaldson: It's a very simple story, Geoff. I seem to live in the moment. I was so happy where I was at each step of the way. I love being a student nurse. I love being a graduate nurse. And that wasn't new because I remember when I was in high school and it was time for me to go on to college, I actually petitioned the principal of Grant High School and asked if I could stay another year because I loved being a high school student. He said, "No, Sarah, it's time for you to go on." But I was perfectly happy being a high school student. Well, then I was perfectly happy being a college student. I was happy being a nursing student. And so I would've been content as being a nurse the rest of my life. I was totally gratified. My life was very complete. My going to medical school is a testament to somebody else. Not to me. I didn't have the brilliant idea of going to medical school, but I profited from the advice and the mentoring that I got that did get me there.

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Dr. Rubin: So let's talk about that. But before we dive into it, I just can't help but reflect on your message of happiness and contentment wherever you are. It's so easy for folks when they're working their way to their ultimate goal to lose sight of that feeling and I just, you know, applaud that recognition, and your making an emphasis of it.

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Dr. Donaldson: Well, thank you, Geoff, because I'll tell you, one of the things I learned early on is it doesn't get you any place to not be happy because if you're always unhappy, or if you're always complaining, or if things aren't right, then you're not very much fun to be around. And if you're not very much fun to be around, people don't choose to be around you, and all of a sudden you cut yourself off. You get nowhere by not seeing the glass half full rather than seeing it half empty. I mean, that doesn't lead to anything that's very much fun.

So you might as well be positive and look for something good out of every situation that you're in.

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Dr. Rubin: So true. So you mentioned that your decision ultimately to pivot into medicine was based upon someone else's influence on you and your life. Tell us about that.

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Dr. Donaldson: Well, my life was full of good fortune. Well, in nursing school, I loved everything about nursing school, but I really loved my surgery rotation and I loved being in the operating room. And I loved trying to anticipate what was gonna happen next. And procedures were quite easy for me. And I like the gratification of being told I did a good job. I got a lot of feedback from me that. And so I used to volunteer or offer to be a scrub nurse. And there weren't a lot of nurses around. They pick nursing students to do activities. So I used to practice. Practice opening surgical packs, and threading needles, and slamming retractors into somebody's hand or hemostats or whatever.

And so simultaneously, when I was, you know, my last year of nursing school, the University of Oregon had a strong surgical program and the head of the surgery had come from the Harvard program and he recruited some young surgical recent grads to come out with him to Oregon to start a surgical program and one of those people that he recruited was named William Fletcher, Bill Fletcher. And Bill Fletcher was recruited from the Harvard surgical service to come start what today we would call a surgical oncology program. He was to take care of the cancer patients.

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And so when Bill Fletcher was an instructor in surgery doing cancer surgeries and I was volunteering to be a scrub nurse or a circulating nurse, I oftentimes became his scrub nurse. So he met me. He knew who I was and he was very kind and he was always very complimentary. And so it was wonderful for me to do a good job and then to get a nice compliment. At the end of all of that, when I graduated, Bill Fletcher had to build a team of people and he offered me a job of being his research nurse. Today we would call it a surgical oncology research nurse or research assistant.

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And so I was like his girl Friday. I worked in the OR with him. I either scrubbed or I circulated. I made rounds with him. He was starting clinical trials. At that time, the clinical trials that were in the west coast was called the Western Cancer Chemotherapy Group. It later merged with SWOG and it was sort of the beginning of the cooperative groups and I was his data aide. I filled out the forms. I sent them into the headquarters. I had little calipers in my pocket and I measured people's lumps and bumps because chemotherapy at that time was experimental. It was being given by the surgeons. And so 5-Fluorouracil, and Vincristine, Phenylalanine mustard, those were all experimental agents at the time. So we'd take these experimental agents and I'd fill out the flow sheets, the number of milligrams and with my calipers, measure the size of the tumors and such.

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So I worked with Bill Fletcher for three years. While I was working with him, he got the idea... He didn't tell me this idea. I was totally in the moment loving my job, but he got the idea that I should take some more classes and I would be of help to him as an employee if I had some more classes be on that, to which were available in the nursing curriculum. And so he was doing extracorporeal circulation and pumping chemotherapy for isolation perfusion and I ran his pump oxygenator and he said, "Well, Sarah, what are you gonna do someday if we have a pump breakdown?" I said, "Oh, I don't know." He said, "Well, I think it'd be good if you could take some physics so you would know what to do."

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Anyway, I went off and took these various classes because Dr. Fletcher told me that I would be a more useful employee. He also was doing some work with radioisotopes in the laboratory and all the people that were gonna work in the lab with him. I had a little lab project working as well. And so if you're gonna work in the lab, you had to have a license to be able to work with isotopes, which meant you had to pass a test and you had to have organic chemistry and the prerequisites to organic was inorganic and trigonometry. Anyway, to make a long story short, while I was working for Dr. Fletcher, I went to summer school and to night school taking these various classes that he told me would be useful to him if I could take those classes. So I did that and after a couple of years, one day he said to me, "You know, Sarah, I think you ought to think about going to medical school."

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Totally a surprise to me. I said, "I can't go to medical school." We talked about it and he said, "Well, why can't you go to medical school?" And I can remember to this day I felt very strong and I said, "Well, Dr. Fletcher, there are four reasons why can't go to medical school." And I recounted my four reasons, which were one, I was too old, two, I was a girl, three, I didn't have enough money, and four, I wasn't smart enough. And Dr. Fletcher was a very visionary, non-flappable surgeon. Nothing could surprise him. And he said, "Well, let's talk about this. First of all, how old are you gonna be in 10 years?" I believe, Geoff, I was like 24 years old and I said, "Well, I'm gonna be 34 in 10 years." And he said, "Well, how old are you gonna be in 10 years if you don't go to medical school?" You know, he sort of talked me out of that.

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And then I told him I couldn't go to medical school because I was a girl, which I truly believe that that was not possible. Bill Fletcher had gone to Dartmouth College and then Dartmouth Medical School which at that time was an all-male school. The college was an all-male school and the medical school had been all-male but he knew as a Dartmouth alum that the board of trustees were considering opening up the school to women. And he said to me without batting an eye, he said, "Oh, well, Dartmouth Medical School is actually recruiting women right now. They're opening their doors to women. They're looking for female applicants." Which was news to me, of course. And the third thing I said, "Well, I can't go to medical school because I don't have enough money." Which was absolutely true. And he introduced to me a topic that I'd never heard of before which today would be called financial aid. And he said, "Well, you can always apply for a scholarship or loan." Which was true because you could get money to go to school at that time.

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And my fourth reason for not going to medical school is I told him, "I can't go to medical school. I'm not smart enough." And he said, "Well, Sarah, don't you realize that colleges and universities have panels of erudite professors who do nothing but understand education and determine curriculum. Do you think you are better than these erudite professors whose full-time job is to determine who can master a curriculum in medical school? Do you think you're better than those people?" I said, "Well, no." And the subject dropped. We didn't talk about it again. But clearly, he had talked me out of the four reasons that I in my mind thought were barriers to going to medical school.

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And it was about a couple of weeks later I was doing an independent research project on some hamsters and putting tumors in them and then treating them and such. It was my own little research project. It was funded by an association that's called the New York Cancer Society at the time. And he said to me, "You know, Sarah, your grant is coming up for renewal." And I said, "Oh. Oh, okay." And he said, "We're gonna have to write a renewal application." And I said, "Oh, okay. Well, when?" And he said, "Well, it's due in a month." And I said, "Oh, okay." And I said, "Well, you know, how can I help?" And he said, "Well, you're going to have to write the grant." And I said, "I am?" And he said, "Yes. And I'll help you." And I said, "Fine." And he said, "And then you're gonna need to go defend the grant."

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I said, "What do you mean defend the grant?" And he said, "Well, you're gonna have to go to New York and talk to the trustees and explain to them why you want to continue your research project." And I said, "I can't do that." And he said, "Well, do you wanna continue doing your project?" And I said, "Yes." And he said, "Well, if you wanna continue doing your project, you're gonna have to do that." And I said, "Well, can't you?" And he said, "I'm operating that day." And I said, "Oh." He said, "If you wanna continue your project, you're gonna need to do this." And when I said, "I don't think I can," he said, "Well, if you can't do it, you don't deserve to continue your project."

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So there I was trying to figure out how to go to New York to talk to some people about the merits of my research project. And a couple of weeks before I was to go, he said, "You know, Sarah, if you're gonna go to New York, maybe this would be an opportunity for you to visit my sister, Sally, who lives in Woodstock, Vermont." I said, "Oh, I'd love to go to visit Sally." I'd heard about Sally and he said, "Yeah. You could go and see the autumn leaves, the fall colors in Vermont." I said, "That'd be fabulous." He said, "Then you could visit Dartmouth." Oh, wouldn't that be wonderful? So he set all this up. I went to Dartmouth which turned out to be an interview, but I didn't know it was an interview. I thought I was just gonna go see the campus. And the long and the short of it was I did defend the grant, but I visited 10 medical schools in 10 days and I came home with applications and I filled out the Dartmouth application and I went to Dartmouth Medical School.

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Dr. Rubin: Wow. What an amazing odyssey. So you were at Dartmouth for two years in medical school and then transferred to Harvard for the final two. Take us through that part of the journey.

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Dr. Donaldson: Well, Dartmouth was just a two-year school at the time because they didn't have the clinical resources in Hanover, New Hampshire to offer clinical experiences. And so originally the class had been 24 people, but at the year they took my group, they expanded the class to 48. That was a big deal because we were an experimental class, we were twice the size. They put six women in their class which was a novel thing. Everything was new at Dartmouth at that time, any rate. And we could apply wherever we wanted to, to go to school. I didn't know where I wanted to apply. And I asked Dr. Fletcher, he had gone to Harvard. And so I said, "Well..." That's where two-thirds of my class were gonna go to Harvard. The rest went to Hopkins, or McGill, or Columbia, or Cornell, or Penn. Anyway, I applied to Harvard and that's where I went for my third and fourth years. And this was very much following the same path that Dr. Fletcher had done. He had been at Dartmouth two years and then he had finished at Harvard. And I was along with two-thirds of my class when we did that.

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Dr. Rubin: Did you feel that your nursing degree influenced your approach to medical school?

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Dr. Donaldson: Oh, it was so helpful. The first two years in medical school were hard for me because it was hard for me to learn to try and tackle basic science again because I had been away from classroom learning of that degree, of memorizing and such. So those were hard years for me. But Dartmouth was an extremely supportive environment. Couldn't have been a better environment to go to medical school. But when I went to the clinical rotations, that was like household duties or something. I was so comfortable. And I'd learned all this. I knew how to write orders. I knew how to talk to patients. I knew what the nurses wanted to have done and I knew how to do it. I was very efficient and so it was easy. And besides that, working with Dr. Fletcher, I'd learned a lot of procedures. So I knew how to start IVs and draw blood. And he'd had me doing little surgical procedures like super clavicular biopsies and tying knots and all

of that stuff. So I loved being a medical student. I was just on top of the world as a medical student.

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Dr. Rubin: Dr. Fletcher sounds like he was an amazing mentor.

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Dr. Donaldson: Terrific mentor.

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Dr. Rubin: Now, how many women were in your medical school class?

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Dr. Donaldson: At Dartmouth, there were six women.

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Dr. Rubin: Did you feel that your status as one of those six women influenced your medical school experience?

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Dr. Donaldson: It was an interesting experience being one of six of a class of 48 because most of the men in our class had gone to either Dartmouth College, an all-male school, or they had gone to an Ivy League college that was all male. So most of the people in the class had never had women in their classes before. And so it was unusual for many of the men in the class to have women there and it was unusual for all of them to have somebody from Portland, Oregon because everybody else in the class was from New England. I mean, I think they must have thought I lived in a tepee out west or something. But the thing that made Dartmouth a little bit of a challenge was because it was novel having women, the school wasn't set up for women. So they didn't have a place for us to stay. There weren't very many bathrooms. There wasn't a locker room. There wasn't a place to hang your coat. It had a dormitory for men. There was no co-educational living at that time, but they didn't have any facilities for women. And so they had to create that. And the six of us became very cohesive sisters. We became really, really, really good friends. We had each other and we were very united in our approach to medicine and we hung out with all the guys in the class. We did everything with them. It was a group. We were one big cell, kind of one big group. We had a wonderful, wonderful environment.

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Dr. Rubin: You described how through high school and college you were very involved in leadership and in a lot of extracurricular activities. Did you have those opportunities in medical school too, to take on leadership roles? I mean, understanding that being one of six women and being so novel, it seems like there might have been a fundamental barrier to being able to pursue those same opportunities in medical school.

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Dr. Donaldson: I don't remember any barriers. I remember that we did all things as a group. One thing that I do remember is maybe the first week of medical school when none of us knew each other very well, I was elected secretary of the class. Well, at that time, because Dartmouth had been an all-male school and all the attendees at Dartmouth Medical School had been de facto members of a male medical fraternity. I don't remember what the name of it was. It had some Greek name. And so that continued, but now I was elected secretary of the class. So it was my job to communicate with the national headquarters. But since it was a medical fraternity for men and my name was Sarah, I needed a new name. So I went through school doing my correspondence for my job as the class secretary as Sam Donaldson.

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Dr. Rubin: Whoa.

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Dr. Donaldson: That is right. I mean the people in post office knew when mail came to Sam Donaldson, they should put it in my mail slot, but the people at the national headquarters didn't know what my gender was.

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Dr. Rubin: Incredible. A future news anchor as well.

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Dr. Donaldson: It's funny, isn't it?

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Dr. Rubin: Yes. That is amazing. Wow. Okay. So after medical school, you had an internship at the University of Washington, Seattle, and then you

pursued a three-year residency in the division of radiation therapy within the department of radiology at Stanford University. What led you to pursue radiation therapy?

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Dr. Donaldson: Dr. Fletcher. You see, Geoff, as I told you, I love medical school. And when I had to decide what I wanted to do, I couldn't decide. And Dr. Fletcher was very much of a coach to me all through medical school. And so when I discussed this with him, he said, "Well, what do you wanna do?" And at that point as a third and fourth-year medical student, I wanted to be just like Dr. Fletcher. I wanted to take care of cancer patients and I was good with procedures and I had a background in surgery. So I decided I wanted to be a surgeon and take care of cancer patients. It was before the word surgical oncology was a name. So I applied for a surgical internship which then rolled into a residency and I applied at the Peter Bent Brigham which is a hospital where I had had my surgical clerkship. And the head of the department of surgery was a well-known surgeon at the time. His name was Francis Moore and everybody revered Dr. Moore.

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And so I applied and I got accepted by Dr. Moore to be a surgical house officer, a surgical intern, and a surgical resident at the Brigham. And I was thrilled with that. That was a big deal because they'd only had one female house officer prior to that and her name was Tenley Albright. And she was this Olympic skier, fabulous lady incidentally. And I was thrilled. I was really walking on a cloud and I was very, very excited. Dr. Fletcher was happy for me and everything was wonderful until I became insecure that I didn't know enough medicine. And I was afraid, well, I didn't know enough about internal medicine. I felt weak in terms of reading EKGs. And I didn't think I knew how to manage ketoacidosis. And I had all of these ideas of things I didn't know enough about.

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And so I went to Dr. Moore and said, "I think I would be a better surgical house officer if I had more medicine." And he said, "Okay." I said, "I think I should take a medical internship." He said, "Well, that's fine, Sarah. We'll hold a position for you." Meaning I would take a medical internship and then come back and be a surgical house officer, of which apparently that was acceptable. And so I decided... I'd been away from home for four years and the University of Washington had a very strong medical program with a powerful chief of

medicine. His name was Dr. Petersdorf, and he was a big infectious disease man and such, and Seattle Washington was not very far from Portland, Oregon. It was one state away, but I was back on the west coast again. And by that time I was longing for powder snow, for downhill skiing, and it was different than Vermont, New Hampshire because I just kind of wanted to go back home for a little bit. So I went to Seattle for a straight medical internship and, Geoff, it was just such fun being an intern. I loved being an intern. I loved infectious disease, and cardiology, and renal disease, and every aspect of it. And I was a good intern.

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So at the end of my internship, I was offered a medicine residency in Seattle. It was a coveted position and I accepted. And I told Dr. Fletcher. It then dawned on me. I'd accepted two positions, I'd accepted a surgical residency and I accepted a medical residency and I didn't know what to do and I again went to Dr. Fletcher and I said, "I don't know what to do." He said, "Sarah, what do you want to do?" And I said, "I wanna take care of cancer patients just like you." And he said, "The world of oncology." He used that word. That was a new word to me. "Needs to have more surgically-oriented people in radiation oncology. I think you should go down to Stanford and meet Malcolm Bagshaw." I didn't know the name, Malcolm Bagshaw, but I said, "Okay." Fletcher had met Bagshaw on a panel or something some years before. They were kind of the same age and contemporaries and such. So I went down to Stanford, interviewed with Malcolm Bagshaw. I met Henry Kaplan. I was interviewed by another powerful radiation oncologist named Scotty Doggett. And at the end of my one-day interview, I was offered a position and I loved Stanford. And I said, "Yes." And I came home and I said, "Oh, Dr. Fletcher, I've just accepted my third residency." Anyway, I took the Stanford offer and that's how I got there.

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And Dr. Fletcher's argument was a good one. And he said, you know, "If you're good, you'll really be good." And the world of radiation-oncology needs more people that think like surgeons. And so that all made sense to me. I said, "Well, I don't know that I'd know enough physics." And he said, "If you're any good at all, you'll know how to hire a good physicist." I said, "Oh, okay." So it was really the wisdom of Bill Fletcher who got me into radiation oncology. I still was flirting with this idea of wanting to be a surgeon. He knew me quite well. And he said, you know, "Here's a wonderful carve-out opportunity for you. And

the field is open right now. This would be something for you to think seriously about." So it wasn't my brilliance at all. It was that I had a powerful mentor who really gave me good advice, was very much of an advocate for me, and he kind of coached me into the right places at the right time.

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Dr. Rubin: Phenomenal. During your residency, you spent three months at MD Anderson in Houston, Texas training in pediatric oncology. What was the basis for that move?

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Dr. Donaldson: At that time, there was no pediatric unit at Stanford. And in radiation oncology, the children with malignant disease were taken care of by the pediatric surgeons or the surgeons who operated on a child, and then quite often they got radiation therapy. In our department, there was nobody doing radiation therapy, but when I was chief resident, it was my job to take the inpatient consults when the pediatricians had a child with like a Wilms tumor, or neuroblastoma, a child that was in the hospital, they'd ask for a radiotherapy consult and I'd run up and triage the decision in what we had to do, etc. So I got to know them quite well. And nobody in the department was particularly interested in that particular area, and I was.

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And so Stanford was interested in creating a cancer program. And Kaplan and Bagshaw knew about this. I didn't know about that, but I said, "I'm interested in knowing about pediatrics." And then we didn't have a program at Stanford. And they said, "Well, you know, why don't you go elsewhere?" Well, there was a big program in Boston at Boston Children's Hospital. And I had been on rotation there as a medical student. They said, "Well, there's another place, it's in Houston, the MD Anderson." So I took elective time and went to the MD Anderson where there was a cancer program for children. And, in fact, the person who was running it was named Jordan Wilber who had been at Stanford and who later Stanford recruited back to help develop a program. Then when I emerged and was looking for something to do, the opportunity came back to work with Dan Wilber and build a pediatric oncology program, which is what we did.

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Dr. Rubin: So ultimately, what attracted you most to the care of children with cancer?

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Dr. Donaldson: Geoff, I didn't know anything about children. I'd done a little bit of babysitting, but I didn't know even how to fold a diaper. I didn't know anything about children, but I liked them, but it was a carve-out. It was an area that wasn't covered by anybody else. And so I think I saw taking care of children as an opportunity because there was nobody already doing that. It was an open area. There wasn't anybody at Stanford to teach me how do it, so I had to go elsewhere. And that led me into a fellowship after my training program, which opened up lots of doors for me.

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Dr. Rubin: So let's talk about that fellowship. That was in France, right? And it was in the departments of pediatrics and radiotherapy at the Institute Gustave Roussy. What were some of your biggest takeaways from training in France given that you had had all your prior training in the U.S.?

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Dr. Donaldson: I had decided that I wanted to learn about pediatrics and to apply it to pediatric radiotherapy. And Geoff, that was the time of the Vietnam war and all my classmates, people that were like my brothers, my very, very best friends, it was a mandatory draft and my classmates were being sent to Vietnam. And I had this sense that we were all in it together and I was exactly like they were, but they were going off to Vietnam. I wasn't eligible to go to Vietnam, women couldn't be drafted. And there was a very big antiwar feeling among the youth of America at the time. We were acting out and writing graffiti on walls and antiwar and becoming flower children and doing all of these act-out things because the youth was very, very disturbed and all my friends were going to Vietnam and I thought I should go someplace.

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And so I thought, "Well maybe I should volunteer to go to the Ship Hope or I should do some kind of something." And I wanted out, like everybody else wanted out. I was tired of all of this regimentation. So that was the idea of going away someplace. So I had this wonderful idea that I'd like to go to London, to England where I could speak the language. And so I went to Dr. Bagshaw and Kaplan and said, "Well, I'd like to learn pediatric radiotherapy

and I'd like to go to England." And they said, "Well, if you wanna learn pediatric radiotherapy, you don't go to London. You go to France. You go to Villejuif." I said, "I don't speak French." Henry Kaplan said, "Learn it."

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And so at that time, the pediatric program, there's this grand wonderful lady, the grand dame of pediatric oncology at Institute Gustave Roussy, Villejuif whose name was Odile Schweisguth. She took care of all the children with solid tumors of Western Europe and United Kingdom. And Mal had taken his sabbatical in cancer biology at Villejuif. Henry knew everybody, every place. And so they both said, "You have to go train with Odile Schweisguth." So I applied and she said yes. So I went off to France, to the department of pediatrics although my training was in radiation oncology to learn about childhood cancer.

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Well, the hardest thing about childhood cancer is learning the biology of cancer and watching the evolution of cancer. And that's what I learned from Odile. I knew radiotherapy or I knew as much as the trainees would know, but I really learned the natural history of cancer from Odile Schweisguth. And I went everywhere with her. I called her Aunt Odile. She later came to Stanford and lived with me on her sabbatical. You know, I was like a niece to her. Became very, very tight and wonderful friends, but she taught me pediatric cancer. And it was a wonderful opportunity for me as I learned that. But what I really learned was how to survive in a place where there's no red carpet. I really couldn't speak the language very well. It was the art of survival. I was very lonesome. I really had to work hard to survive, to figure out how to get around. And that was a big eye-opening character-building experience. And it was extraordinarily meaningful to me.

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Dr. Rubin: So when you began your faculty appointment at Stanford, radiation therapy was a division of the Department of Radiology. What was your sense of the degree of integration between diagnostic radiology and therapeutic radiology at the time?

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Dr. Donaldson: Well, it was a department of radiology. It had two divisions prior to just a couple of years ahead of me. It had been everybody trained in

general radiology and then they did what they did. Kaplan had started a training program just for radiation oncology a couple of years before me and that was the program that I entered, but we were one department and we were like a division, but we did everything as a group. We had conjoint faculty meetings. So I grew up with people like Ron Castellano, and Bill Northway, and Bruce Parker, and Lou Wexler, and all those people that you remember from Stanford, we all did everything together. That was wonderful for me because today if you're are gonna be good in radiation oncology, you have to appreciate diagnostic imaging. And I grew up with diagnostic imaging. I didn't know anything about image interpretation, but I had lots of people that did. And so I learned early on that the power of success in radiation oncology was having a partnership with diagnostic imaging. That was just so fundamental to me because you can't do radiation oncology if you don't know where the cancer is. And we weren't trained to know where the cancer is, but I knew how to form relationships and camaraderie with the diagnostic radiologists because we were one department, we did everything together.

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Dr. Rubin: Now, radiation oncology has evolved as a field immeasurably since those days when diagnostic radiology and therapeutic radiology were all a part of one department and it's such a rich field indeed. I'm curious though, thinking back, do you feel that anything has been lost through the subsequent separation of the two fields into completely distinct departments?

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Dr. Donaldson: Well, I think we have to work really hard to do things as a team. And it's not just radiation oncology and diagnostic imaging, but radiation oncologists have to do things with the team, with pathology, and with medical oncology and biology, etc. And it is true that we cannot be compartmentalized. We have to do things as a unit. And if there's any criticism I have at all about the subspecialties in medicine, it's that we tend to live in our own little selves and we accomplish so much more if we work as a unit, as a team. And so I worry a lot about that. I also worry that today in radiation oncology where we're so very dependent upon the technology, and the explosion in technology has just made the field wide open and wonderful just like in diagnostic imaging, but we're so dependent upon the technology and they're fun gimmicks to have, they're fun little tools to have in your toolbox and we tend to attract people that like those kinds of things, but we need to attract people that are good communicators that wanna take care of patients because these are just tools like

anybody can turn on a linear accelerator but to know when to turn on the accelerator, not how, but when to use it.

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And so I worry that we're so focused on the technology, like in radiation oncology, we're focused on contouring and giving higher doses to smaller fields, etc. But what we really need to know is the big picture, not just our little tool that happens to be something that's in vogue right now because it's like a sign wave, things go in fashion and out of fashion, and in, and out, and in, and out. And I don't know where we're gonna be 10 years from now, but if we don't know the principles of taking care of the patient and the biology of the disease, and how to communicate, we won't be anywhere. I mean, I truly believe medicine cannot be practiced robotically. I do think artificial intelligence has huge things to help us with, but we do need to remember the skill of communication and taking care of patients.

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Dr. Rubin: Absolutely. Now, I wanna take you back to 1973 when you were beginning your career as an assistant professor, which, of course, was before the introduction of both CT and MRI. I'm less familiar with technology development and linear accelerators and other tools for delivering targeted therapies in those days, but help us see the department and the practice of what was then therapeutic radiology in those days through your eyes and experiences.

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Dr. Donaldson: Well, I had very strong leaders, Henry Kaplan and Malcolm Bagshaw, they are wonderful doctors, wonderful clinicians, very powerful leaders in the field at the time. The arch of radiation oncology was very clinical. We did very thorough physical exams, comprehensive histories, and physicals and then we needed to define a field and it was largely by physical exam or plain film, you know, a chest X-ray or an abdominal film, a KUB, and then putting a big square on the center of the lump and maybe some beam-shaping devices and treating through and through. Nothing was three-dimensional. We had to learn to triangulate, those principles of trigonometry because, you know, we had two fields. We had anterior and posterior, and that is all we had. Sometimes you'd have a lateral film and you had to figure out where the kidney was or where the brain stem was. It was really very rudimentary.

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Dr. Rubin: Were you exclusively dedicated to pediatric care at that point?

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Dr. Donaldson: No. No. Nothing was exclusive because everybody did everything because we were very much generalists. The department was so small that everybody did everything. But we did have some people who were spokespeople for certain tumor boards that they were supposed to cover or certain responsibilities and we rotated those around all the time. So, no, I had very broad training in all of radiation oncology and we had neck and GYN, and sarcomas, and CNS and etc. But I became the spokesperson for the pediatric program like Rich Hoppe became the spokesperson for the lymphoma program, etc. Those little carve-outs came down the line along with our academic growth and interests and such as the field began to broaden. At the beginning, we all did everything.

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Dr. Rubin: But as time evolved, you ultimately became exclusively focused on pediatric care or no?

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Dr. Donaldson: No. Nothing is exclusive. And especially if you're in departmental leadership, that's nothing exclusive. I was the spokesperson for a program and I helped build that program. And I feel very proud of the pediatric program at Packard Hospital. But when your department is small, everybody does everything. So at some time in the department, I've done head and neck, or GI, or GU, or sarcomas or whatever. Sometimes I covered maternity leave or sabbatical leave. You just did what needed to be done. And I thought about that at the beginning of when the American Board of Radiology started doing oral exams and they had specific exams. Sometimes I was an examiner in GI and sometimes I examined in head and neck, sometimes CNS. Ultimately, I ended up examining in pediatrics, but that was after many years of doing examinations in other areas. At the beginning, everybody did everything because the field was so small that we didn't have just specific carve-outs.

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Dr. Rubin: Now, you've held many leadership roles within the department of radiation oncology, including vice-chair for many years. Tell us about those roles and your perspectives and preferences.

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Dr. Donaldson: Well, I had the best job of all because as vice-chair of the department, I could work with a very powerful chair. When the field was really small, it was sort of expected if you were in academic medicine, and Henry Kaplan very much felt...his goal was to put a Stanford-trained radiation oncologist in every center around the country. That was what he wanted to do. He was into populating the country with Kaplan-oriented Kaplan-trained people. And so it was expected I too would become a department chair at some place or other. I wasn't terribly excited about that, but a lot of people expected that I would. And when the offer came to me, I didn't think I'd be a very good chair, but I did tell David Corn who was our dean at the time that I would help him recruit the very best person. And I thought the best person in our department was Rich Hoppe. But we had to have a national search.

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And so I spent much of my time trying to convince Rich that if he were offered the job and he would take the job, I would be his first lieutenant and I would help him all the way through. And at one time I said to him, "Rich, if you take the job..." And he was offered the job, and I said, "If you take the job, I will work hand in hand with you and I will never say no to anything you ask of me." Well, Rich didn't ask of people because he was trying to help them all build their own careers. But I did just that when I became his associate chair. My job was to put out fires while they were still smoldering before Rich was aware of them.

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We worked very, very well together. And why we worked well together and why it was so wonderful for me is that Rich was in charge. He was a very, very strong chair. We met regularly. We had lunch together like weekly and we could talk about whatever was going on. We could cover for each other. But, in fact, we covered twice as much territory because he could go to the executive committee and I'd go to the finance committee or I'd go to the hospital board meeting and he would be off to clinical chairs meeting or something. Whatever it was, we could be twice as visible and cover twice as much territory and the department grew from that. And also with Rich being the chair, and that was a full-time job and he was very, very good at it, it freed me to do things outside of Stanford which gave me the opportunity of helping Stanford be on the map in other areas of oncology or radiology at the national level. And I couldn't have done that by really spending all of my energies. I didn't have that much

bandwidth. I couldn't do that. We worked very, very well together. Rich and I work well together.

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Dr. Rubin: I look forward to returning to the topic of your national leadership contributions, but before leaving Stanford, I can't help but note that I think there's maybe four single-spaced pages on your CV of committee contributions and leadership assignments that you pursued on behalf of Stanford University, the Stanford School of Medicine and associated hospitals and cancer center. Were you drawn to all of those committee assignments or drafted to them?

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Dr. Donaldson: You see, Geoff, the pool of women was very small at that time. And it was from some powerful women at Stanford that began pushing the women's movement in the '60s. This was before I came on. And so there were some very, very strong women that wanted to make their voices heard. And so there was an awareness of the importance of diversity and inclusion. It was lip service in a way. It was talked out a lot, but there wasn't a whole lot of action. So at Stanford, when the leadership wanted to populate committees, they wanted to have represented a targeted minority. They wanted to have a woman, they wanted to have a this and a that. And the pool was very small. So when I was offered an opportunity, I said yes. And Henry Kaplan had taught me that if you do a job, you're going to do 110%. We don't just do 100% because Kaplan didn't do 100%. He had an expectation that you're gonna do something, you're going to do it well. And I learned from that, that if you do something well, well, you might get asked to do two things then next time. I mean, because that does happen. So I think it was opportunities came to me because I was in the right place at the right time and the right gender, not anything else because the pool was just very small.

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Dr. Rubin: But you must have been very effective in your roles on these committees. I'm sure that it wasn't sufficient that you were a woman, that you were a very effective one.

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Dr. Donaldson: Well, thank you. I would say that it was a tremendous opportunity and lots of fun to be able to be part of a new institution, or a new committee, or a new program working with really terrific people from all over

the country. Some of them had a different idea or different cultures and working together on whatever the mission was that we were assigned to do. I found it a wonderful opportunity and just tons of fun to meet such wonderful leaders and good friends and colleagues from elsewhere. You know, it was just pure enjoyment and the payback was just fun, just so rewarding.

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Dr. Rubin: That's fantastic. Now, back in 1974 during your first year as a faculty member, you began service on a Stanford committee that was called the Committee on the Education and Employment of Women. What was the focus of that committee and how might you contextualize this work some 47 years ago with the diversity, equity and inclusion efforts of today?

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Dr. Donaldson: That committee was led by some very powerful women in the university, in the law school, the school of H&S. I think there was a woman from the school of engineering and school of business. I would say one thing about Stanford University, the medical school being on the same campus as the university, being on a university committee then exposes you to this talent in other schools that you wouldn't have if you weren't on a small campus where you just walked across Palm Drive and there you were, you know, in the faculty senate or whatever. So it was a wonderful opportunity to meet people from other departments. And these women were so smart and so talented and they felt like they had something they wanted to say.

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So they brought awareness of the importance of women getting equal pay and equal opportunities and they pointed out data where there were very few women in leadership and very few women being offered comparable salaries. I knew nothing about all those things, Geoff, I was just happy where I was. I didn't realize it was a big education to me. But that committee brought awareness to Stanford University that ultimately the president of the university and provost acted upon and now there is parity at Stanford. But it took a long time. And there are still people who are fighting for it today because, you know, they're not quite happy enough, but it's a lot, lot, lot better than it was.

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Dr. Rubin: Yeah. It seems that those efforts had very early origins at Stanford compared to other parts of the country. So I'd like to switch gears to national

service. You have contributed immeasurably within so many formal and informal roles to a number of national organizations, including serving as president of ASTRO, which is the American Society for Radiation Oncology, president of the American Board of Radiology, President of the RSNA, and president of the North American continent for the International Society of Pediatric Oncology. What drove you to take on all of those roles?

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Dr. Donaldson: Well, they didn't come all at once. They came in sequence. My first opportunity was having leadership in ASTRO, and that was fun. I mean, it was the Radiation Oncology Society. I was given the opportunity to be on the board of directors. There was no runoff election. I think Sam Hillman was on the board at the time and he suggested my name and I served on that board for 12 years or so and by that time they were then ready to have contested elections and they wanted their leadership to have some experience on the board. It was very, very helpful if you were gonna be an officer of the organization to have been on the board of trustees to have known a bit about the organization. So that just evolved.

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And through ASTRO leadership, you get to know leaders in other organizations nationally and internationally and it led one thing to the other. So ASTRO was fun. It was not an easy time for our society because we were breaking away from diagnostic radiology and trying to decide who we were and there was the college and then there was ASTRO and there were some competitions and this and that, but it became very clear to me that the answer was being inclusive and not exclusive and just widening your circle and inviting more people to the table and that was the way to get people to work together and that worked very, very well through ASTRO and has worked through the other organizations as well.

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Dr. Rubin: Among those many leadership roles, are there any successes or wins that stand out that you are most proud of?

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Dr. Donaldson: I'm most proud of something that would seem a bit obscure today but it wasn't obscure at the time. Early on, I was given an opportunity to give exams for the American Board of Radiology and then was made a trustee

of the American Board of Radiology. And it was a smaller group at that time. It was heavily influenced by diagnostic imaging. It was a 12-member board. There were three radiation oncologists and eight diagnostic imagers and one physicist. So we were a group of 12. And the one physicist had been appointed. And at that time, there were two certifying boards in physics. There was the American Board of Radiology and there was another organization called the American Board of Medical Physics which was a startup competing board started by some radiation oncologists that were upset about how the ABR was running things. It made no sense to me why we had two boards for physics.

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And so it became my internal private goal that I wanted one board for medical physics and not two. And I worked hard at that. And what happened was very interesting. The physicists that were unhappy were unhappy because they had one voice at the table and they didn't feel like they were full and equal partners and they wanted to be. So what it took was uniting with diagnostic imaging and going around and talking to the AAPM and the other organizations and gradually working toward making the physicists full and equal partners at the table at the ABR. And we did that. So now there are equal numbers of physicists as equal numbers of radiation oncologists, we're all equal and we're all one board. And then I did something that was really important, but it was an uphill fight. And that was that I thought the physicist ought to be in line for leadership just like a diagnostic radiologist or a radiation oncologist. And the American Board of Medical Specialty says, "Oh no, no, we're the American Board of Medical Specialists. You have to have an MD degree. We can't have a physicist in leadership."

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Well, there was a wonderful physicist named Bill Hendy who was in the Medical College of Wisconsin, who had run the department of radiology at the Medical College of Wisconsin, an extremely talented physicist and he was on the board. And not only did we put equal number of physicists on, when I was chairman of the nominating committee, I nominated Bill Hendy to become the treasurer, then the secretary, then the vice president, and then president. And so that meant that I had to go to the ABMS and fight for a non-MD being president of the American Board of Radiology. He was not a radiologist, he was a physicist, but he had been chair at the Department of Radiology. And I did that. When that happened, the physicists became happy. The other board kind of dissolved and now we have one board of physics and the physicists are coequal

partners with us. And that was a really important, fundamental contribution and I'm extremely proud of it because it took a bit of negotiating and lots and lots of trips and a lot of sort of gaining trust, but ultimately, it worked out and it was an important advance in my way of thinking.

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Dr. Rubin: That is an amazing accomplishment. You do deserve to be very proud of that. Now, I'm gonna turn the tables on the question and ask you if there's any circumstances that you can recall that did not turn out well, or that were particularly difficult to manage that you might share as learning opportunities.

[01:00:54]

Dr. Donaldson: Certainly, there were lots of areas that were difficult. Lots of things are difficult. In my own private way, I'd come home and cry over things that I didn't think I was successful in or I hadn't run as well as I wanted to or didn't turn out as well. But, Geoff, I tried to dismiss those because it doesn't get you anywhere being in the basement, you just have to put on your happy face and come back and try harder. I made the analogy that, you know, if you're on a sports team and if you lose the opening game, you don't cancel the season, you practice harder and you play the next game. If you don't get your first grant, then you rewrite the application and you apply again. And so it doesn't help just feeling defeated because you didn't carry it off quite as well as you thought you should have because we all set a high bar for ourselves and sometimes we set a bar that's not achievable and it doesn't help to sort of just be filled with unhappiness because it didn't work out your way. You have to take that as an opportunity and figure out how to reformat it, or how to rewrite it, or how to redo it so it's better the next time. I firmly believe in that.

[01:02:03]

Dr. Rubin: Are there lessons that you've learned from national and international service that have helped you to be a better doctor to your patients?

[01:02:11]

Dr. Donaldson: I believe in inclusivity. I believe that the more people at the table, the better. In medicine, I believe listening to all the consultants, listening to everybody in the family. I think COVID has been very hard for us because I like to be able to see a patient, hold the hand of the patient. I want the patient's family and representatives to be there. I wanna know everything about the

family. I wanna know the grandmother and their grandchild and know them all by first name. I want them to trust me. And those kinds of relationships, which I think are really important for patient care require that you be together. You can't do that effectively, in my opinion, on a virtual visit or a Zoom call.

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And so while clinical medicine has been so much fun for me in pediatrics, 80% of your children are long-term survivors and so I've got this huge family of patients that I've taken care of that I'm a very integral part to their family over many, many, many, many years. So I think the most important trick that I learned was including everybody, the referring physician, and the primary pediatrician, and the specialist, and the grandmother, and the babysitter and whoever was there, the whole support group, we all are in this together and we're all doing it together. And that really helps, really helps when you've got a difficult problem that you need to somehow find out a workable solution.

[01:03:33]

Dr. Rubin: You have been an avid contributor to your community and I'd like to hear about some of the activities that you've pursued, but first I wanted to ask you what draws you to community service when you're already so dedicated to serving your patients and your profession?

[01:03:48]

Dr. Donaldson: Well, the best thing about community service is you meet people beyond the hospital, beyond science, beyond your little self. If I had any criticism about my life, I'd say that I spent all of my time in the hospital doing what I'm doing. I did it by my own choice, but I turned out, in my opinion, to be a not very worldly person. And so now that I've stepped back from some of those clinical duties I have for more opportunities to do clinical community service, I'm becoming a more enriched person. I have more time to do cultural things, to go to the theater, to read books, to travel, to do things that I didn't do in the same dimension when I was doing medicine 24/7.

[01:04:30]

Dr. Rubin: For a few years in the mid-2000s, you served as a research associate for six hours each month at the Stanford Health Library. I'm assuming that that was helping patients and their families learn about their illnesses. So tell us about that experience.

[01:04:47]

Dr. Donaldson: Yes. I was into doing community service at the time and I didn't think I was very good at the computer and I certainly didn't think I was very good about doing library searches. So I offered to do volunteer work at the Stanford Health Library at sort of the reference librarian and I worked on Sunday afternoons. And Stanford Health Library had a little branch office in the Stanford shopping center. And so people would come in the front door and they'd say, "Oh, my husband's got gout. I need to find a diet that doesn't have uric acid in it, a diet for people with gout." Or, "Oh, you know, my husband or my wife is now taking a new medicine and she's got spots in her skin and I wonder if that's a drug toxicity, can you help me?" So I learned how to use the computer to help as a resource to people that came in the door that needed to know the answers to simple little questions. Some of those things I knew because I had a background in medicine, but I didn't tell them I had a background in medicine. I just told them, "My name is Sarah and I'm working today and nice to meet you." So they didn't know who I was, but I did it because, Geoff, I knew that I was going to learn something new. I learned a lot about the community, a lot about interesting people that walked in the front door, and I became much more facile at the internet.

[01:06:00]

Dr. Rubin: That's fantastic. I mean, I just have to emphasize that, you know, amongst all of your hours in the hospital, taking care of patients, pursuing the management and leadership of the department, all of these committees, you finally had time off and you headed to the Stanford mall to go to the health library to help patients learn about their illnesses. That's really an amazing example. You were also very involved in the Community Breast Health Project. Maybe tell us a little bit about your involvement in that organization and what you contributed there.

[01:06:33]

Dr. Donaldson: Well, that's a wonderful organization that was started by a Stanford surgeon, a breast cancer surgeon, and was largely supported by Stanford and the healthcare centers in the Bay Area. It's an organization that provides health, service, education, and opportunities with initially women with breast cancer, now breast and ovarian cancer. And I got into doing that because in my role in the department, when I wasn't doing pediatrics, I would oftentimes back up one of my colleagues and one of my colleagues, Don Goffinet, was taking care of the breast cancer patients at the time and when Don would go on

holiday or he'd be away, he'd ask me to take care of his breast ladies. So I got to know the breast service really quite well. And it was through taking care of breast cancer patients that I realized that they needed help in knowing where to buy a wig or how to buy a bra, you know, they needed to know the names of support groups or grief counseling, or exercises for your arm, or what you do with lymphedema, or all of these various things that breast cancer patients have.

[01:07:41]

And sometimes they don't ask their physicians about that, but, you know, if you are really a member of the team, you kind of get to know what their problems are. And so I realize about this resource and ultimately I offered my service there. You know, I would go talk to their support groups, sort of explain radiation therapy or how you dealt with skin reactions or what you expect if you're gonna have radiotherapy or what the toxicities might be of getting radiotherapy after having a mastectomy and on and on and on, just normal questions that patients want, but it was patient education. And it was very, very useful. It's one of the best community services in the Bay Area today and still very, very active.

[01:08:18]

Dr. Rubin: Now, most recently you've turned your focus toward non-healthcare-related support, serving theater works of Silicon Valley as a member of the board of directors and executive committee among other roles. What have you gained from pivoting away from healthcare and medicine and what have you found that you've been able to contribute most valuably there?

[01:08:37]

Dr. Donaldson: When I stepped back from doing medicine full time and I realized I knew so little about everything, the one thing I'd always loved was theater. I mean, I liked to go to the theater. I found it very entertaining to go to the theater, etc. And when I had the opportunity to get to know a little bit about TheaterWorks Silicon Valley, I was offered some committees and things to do and ultimately came on their board. Now, the wonderful thing about TheatreWorks Silicon Valley, it's a regional theater. It happens to be a very, very good regional theater, it happened to be the Tony Award winner two years ago. And TheatreWorks is an equity theater that brings in actors that are unionized, so people that can work in New York or can work in Los Angeles, can get an equal salary if they work at TheatreWorks Silicon Valley.

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So we have access to wonderful talent and take care of them well, and a fabulous artistic director, wonderful board. And why it's so much fun is for me, it's like learning a new language. It's like a new curriculum because when you really get into theater, not just going to the theater and watching the main stage, but what goes into costumes, and set designs, and make a production, and getting to know the actors and all of the things that go into building really good theater. It's very educational. It's a whole new set of people whose orientation and understanding is so broad and so networked and just tremendous fun. So I have learned a ton from TheatreWorks Silicon Valley and I'm having such a good time doing it because it's all new. I'm like a child in a candy shop getting exposed to all these new things and I find it exceptionally educational and very entertaining and really fun.

[01:10:21]

Dr. Rubin: Now, amongst all of these professional activities and service contributions, do you have any hobbies or activities that you pursue just for yourself that re-energize you and help you to unwind?

[01:10:34]

Dr. Donaldson: The greatest extracurricular activity I do is outdoors. And there I have to thank my own residents and trainees because when I was program director in my department when we had these fabulous residents, one time one of the female residents invited me to go to the gym with her and she said, "Dr. Donaldson, you need to come to the gym and do a step class with us." I had no idea what a step class was. Well, I went to the gym, and then from the gym I did the step classes and then we did one class versus another class, and then it was spinning then that led to bicycle riding.

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And at the gym, I met a group of women who were about the same age and the same energy level as I was that were also going to the gym and we began doing activities together most regularly a walk. For a long, long, long time, we walked the dish every morning, Tuesday and Thursday morning at 6:15, just walk the dish and that was our little exercise. And then we began taking a trip every year to walk someplace. Well, the walkers have been walking together for almost 40 years, I think 37 or 38 or something like that. And we've walked through Europe, Scandinavia. We've walked through many, many, many places. Right now we're planning a trip to Japan. And so the walking group has become a support group, but we walk regularly. I also bicycle and I go to the gym and do

Pilates and do other things. So I would say that outside of the hospital and then outside of doing TheaterWorks and other community services, I try to do some kind of physical fitness every day.

[01:12:12]

Dr. Rubin: What advice, Sarah, would you give to a young scientist or physician who's inspired by your journey and would like to pursue leadership in healthcare?

[01:12:21]

Dr. Donaldson: Be efficient, say yes. And if you accept a job, do so with the intent of giving it 110%. We shouldn't ever take on anything if we don't give it our very, very best and try to fulfill the mission of whatever the job is that we do.

[01:12:38]

Dr. Rubin: Well, Sarah Donaldson, you've been a role model for me for many, many years. From my earliest days as a resident at Stanford, you stood out in your openness to mentoring, to helping folks develop in their careers, and to leadership within our institution at Stanford and then beyond nationally. I've personally gained so much from knowing you and getting to work with you. And I am so delighted that you have shared your story with us here so that others may gain from your example. Thank you for joining us today on the podcast.

[01:13:15]

Dr. Donaldson: Well, thank you, Geoff. It's been a real pleasure.

[01:13:26]

Dr. Rubin: Please join me next month when I speak with Alexander Norbash, professor and chair of radiology, and adjunct professor of neurosurgery and neuroscience at the University of California, San Diego School of Medicine, and the radiologist in chief at the Hillcrest Thornton and Jacobs Medical Centers and the Moore Cancer Center. Alex has held a number of leadership positions within academic radiology, including director of head and neck radiology at Stanford University Hospital, director of neuroradiology, founding director of interventional neuroradiology, founding director of endovascular neurosurgery, and co-director of the Cerebrovascular Center at Brigham and Women's Hospital in Boston Massachusetts, and chair of radiology and

assistant dean for diversity and multicultural affairs at Boston University and Boston Medical Center.

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After joining UCSD as chair of radiology in 2015, he served a term as university-wide associate vice chancellor for equity, diversity, and inclusion, climate, and professional development. He is past president of the American Roentgen Ray Society, the Massachusetts Radiological Society, the New England Roentgen Ray Society, the Society for Chairs of Academic Radiology Departments, and currently serves as vice president of the American College of Radiology. An avid technology innovator, Alex has founded six companies, served on the advisory boards of over 20 companies, and is founder and faculty director of Blue LINC, which stands for learn, innovate, network, collaborate, a biomedical incubator certification program that includes students from the schools of medicine, engineering, and business.

[01:15:04]

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