OREGON HEALTH SCIENCES UNIVERSITY HISTORY PROGRAM

ORAL HISTORY PROJECT

INTERVIEW

WITH

Gary Jones, M.D.

Interview conducted February 1, 1999

by

Joan Ash and Linda Weimer

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SUMMARY

The interview opens with Dr. Gary Jones describing his early years: though born in Portland while his father, Dr. Richard T. Jones, was attending the University of Oregon Medical School, Gary's first memories are of Philadelphia, where his father interned, and of Cal Tech, where his father completed his Ph.D. Born into a family of doctors—grandfather Dr. Lester T. Jones, great uncle Dr. Arthur C. Jones, uncle Dr. Warren L. Jones, and mother Marilyn, a medical technologist at UOMS—Gary discusses his early interests in science and medicine. Fascinated equally by basic sciences and clinical medicine, he would struggle for many years before finally choosing patient care over pure research. He talks about his undergraduate studies in biochemistry and his decision to continue on into medical school, still believing that his path would lead him into a career in medical genetics, or some aspect of research in biological sciences with clinical applications.

When the time came to choose a further course for internship and residency training, Gary found himself leaning very heavily towards pediatrics, but still with a focus on genetics. He discusses his nine years of post-graduate training in genetics and pediatric oncology, first at Minnesota under Robert J. Gorlin, then in Los Angeles with Buddy Weissman, and finally in Cincinnati as a Procter Research Scholar, studying tumor metastasis in transgenic mice. When his Procter Scholarship was over, he rejoined Weissman, this time at the University of North Carolina in Chapel Hill, and continued his animal research.

After several years, Gary finally realized that he preferred patient care to pure research. He jumped at the chance to rejoin his alma mater, now called Oregon Health Sciences University, as an Associate Professor of Pediatrics. He talks about the explosive growth of the campus during the 1980's and 1990's, and the energy and excitement generated by new buildings such as the BICC, the Vollum Institute, and the new Doernbecher Children's Hospital. He outlines what he perceives will be the major challenge for OHSU in the coming years: how to maintain growth and continue to attract top quality personnel in a time of shrinking budgets and managed care.

Gary also talks at length about his family, both the medical men and those who chose other paths. He discusses the influences of the earlier generations on his own career, and muses about the possibilities for yet another generation of Joneses in medicine. He reflects, mid-career, on his accomplishments to this point, and finds pride in his ability to provide the best possible care for young children and their families.

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Interview with Gary Jones, M.D. Interviewed by Joan Ash and Linda Weimer February 1, 1999 Site: BICC 513 Begin Tape 1, Side 1

ASH: It's February 1, 1999, and Joan Ash and Linda Weimer are interviewing Dr. Gary Jones in BICC 513.

Of course, my first question to you will be going way back. Where were you born and raised?

JONES: I was born, and at least initially raised, in Portland, Oregon, in fact. My first home, although I don't remember it, was actually just a little ways down on—I guess it's U.S. Veterans Hospital Way. You know, this little road going right down here. There's an apartment that's still there, and periodically, when we drive by with my parents, they'll say, "Oh, yes, we remember that." But it was when my father [Richard T. Jones] was in medical school. And, as I say, I don't remember anything of that period of time, because my father then did his internship in Philadelphia. So I think I must have been all of only a couple of years old or so when the family moved—the family as it was at that time—moved from Portland to Philadelphia.

ASH: The family was made up of?

JONES: Mom, Dad, and me. I guess—my mother talks about some dog. I don't know if they brought the dog with them or not. I think it was some kind of Chihuahua type thing, some small dog that would roll over and such.

ASH: So what were your first memories? Were they in Philadelphia or...

JONES: I think my first memories—I can remember a large restaurant with fantastic murals on the walls in Philadelphia. For some reason I remember that as being Philadelphia, although I don't really remember a lot of the days there, because the days were relatively few in number. My father did his one-year internship at the University of Pennsylvania and then picked the family up again and moved, for him, back down to Southern California, where he completed his Ph.D. at the California Institute of Technology.

And I think it's the days in Pasadena, California, that are first amongst my real memories of sort of becoming conscious and growing up within the family. I can remember the place we lived in was this actually fairly good-size apartment that was right on the edge, or not far from the edge, of the California Institute of Technology (Cal Tech) campus, and I can remember sometimes walking on campus, walking around some areas of the buildings there. I don't necessarily remember my father in any kind of scientific-looking garb doing sort of

something out of *Frankenstein*, you know, with the arc lights and those things coming up. But I certainly do remember Southern California.

My father finished his Ph.D. there, and then in about 1960, not too long after the birth of my youngest brother—I also have two younger brothers—moved back up to Portland, so spent most of my life growing up, at least from the age of about five, six years old on until I graduated from medical school, back in Portland, in the Portland area.

ASH: What do you remember about your grandfather [Lester Jones]?

JONES: Well, I remember my Grandfather Jones quite well, I think primarily from the days that we were back, having moved back to Portland. I'll certainly always remember him and his house. He had a house that was sitting up by Hoyt Arboretum, a beautiful house sitting up on top of the hill. A big place. It's essentially the house my father grew up in. And I always remember it because it was a very magnificent, very nice house. It was one of those places where always one of the last thing my parents were saying is, "Don't break anything," you know, as we were getting out of the car to go to Thanksgiving dinner or whatever. It had great views. I just always remember the views of the mountains were just beautiful up there.

My grandfather was quite the gardener. He had a beautiful, beautiful landscaped garden in the back of that house which I'll always remember, because my brothers and I would always try to find or forge our own trails through the back portions of the hedges and things. He definitely, as I will always remember, had great pride in his blueberry bushes. I always remember the blueberry bushes, if for no other reason because when it was blueberry season, the birds would come down from everywhere. It was like something out of Hitchcock, you know, all the birds coming in. So he had to put these big nets over it. So it was always this fantastic, huge, huge hedge of blueberries, all in netting, and you'd kind of crawl inside there and pick these fantastic, luscious blueberries. So I remember my grandfather, I think, from his gardening, really, more so, at least initially, from his work at the Medical School and his work as an ophthalmologist. But certainly very remarkable in terms of the dinners up there at the house.

ASH: It's interesting, because I believe your grandfather knew Dean Baird, is that correct?

JONES: That's right.

ASH: And Dean Baird was also a great gardener. So they must have had that in common.

JONES: They had something in common, that's right. Unfortunately, my ability to garden was not passed on as an autosomal dominant trait, because I'm afraid I do not have the same green thumb. But I do know very much that he enjoyed that for a long, long time.

ASH: Then, as far as his work in ophthalmology and teaching anatomy here, do you

have any memories of that?

JONES: Sure. I guess I remember—mostly in terms of the professional aspects of my grandfather, I remember two things: one was, I knew he was an eye surgeon and that that seemed pretty amazing, you know. The whole idea of things poking into eyes and everything, of course, when you're six, seven years old, sounds pretty gruesome. But I remember I had a lot of respect for the fact that he was an eye surgeon. And he did a lot of surgery through an office that he also had downtown, I believe in the Portland Medical Arts Building. In fact, I can remember, I think, going and visiting him once there in his office.

But I also remember him because he did a goodly bit of travel, and particularly had a number of foreign doctors, physicians, et cetera, that he was mentoring at various times. I think one of his things that he really enjoyed was aspects of academic medicine, particularly in his interactions with folks overseas as much as what went on up on the Hill. I remember him helping to get published an article from a Japanese ophthalmologist, and I think he had a lot of pride in being able to do that. And so I was very impressed with the somewhat worldly aspect to who my grandfather knew in his interactions, and, as I say, I think very much in terms of his enjoyment of teaching and helping to mentor and helping along other folks in the trade with aspects of what he'd done.

I do know he very much enjoyed clinical practice. I can remember hearing some of the stories about him meeting up with patients who he had been involved with years and years before and them coming up and still thanking him to this day, you know, for the work he had done for them, and those types of things. So all those things I guess I kind of remember.

In terms of teaching the students, dental students and other folks that he was involved with up here, I guess I really didn't get as much of an impression about that—other than hearing that he did it—until I had the opportunity as a medical student to have him come and help out for kind of a special session, as it were, or help out one day, one afternoon, on our cadaver. My fellow cadaver-mates—I'm not sure what the right term is, but the four people that were assigned to a cadaver—we were at a point where we were doing the dissection of the orbit of the eye, in that area, and I saw it as a great opportunity, and it really was a great opportunity, to have my grandfather come up, and really watch a pro at work go through the process. It was helped along by the fact that we were able to find some nursing students to kind of be there in the crowd as well. I noticed my grandfather was pretty good at performing before that type of audience. So that was very enjoyable.

ASH: Was he retired at that time?

JONES: He was retired.

ASH: But he had taught for many years.

JONES: He taught for many years—he could do it blindfolded, I'm sure. You

know, he could do the whole thing. Not to get too graphic about it, but gross anatomy for a first year medical student, I mean, you're feeling pretty good if you can identify the liver, you know, right off the bat, a large structure like that. Here, this guy was dissecting out these obscure little muscles and all these things in the area around the eye. So, yeah, we felt that we'd had a complete tour of the human orbit that day, and heard some good stories, I think, in the process, so that was very enjoyable.

So I guess that's what I always remember in terms of some aspects of direct teaching that my grandfather was involved with.

ASH: Well, then, to backtrack again, I'd like to ask you about influences in your life that helped you decide what you wanted to do with your life.

JONES: Sure. Well, I think the influences that were there were not necessarily direct influences. [Tape stopped.] I think that my father—perhaps his influences were a little more directed towards expectations, if you will, or at least strong recommendations in terms of how he was going to pursue his career. And, perhaps as a result of that, I think my parents, particularly my father, was much more, you know, kind of hands-off. Certainly there to help and guide in whatever way, but certainly they were not direct influences of, "Okay, you're going to go to college, and then you'll go to medical school, you know, and go on from there." Not at all.

So the influences, I think, hence, were somewhat more subtle—but definitely were there. I can remember my father coming home from work—and this was when I was quite young, and so a lot of the words that were thrown around, I didn't quite understand. I'll always remember "hemoglobin" being an early word—if not in my vocabulary, because I'm not sure I was using it appropriately. I think it was something very mystical. You know, something—"globin" was close enough to "goblin" that there must have been some kind of connection there. But I can remember some discussions. And I certainly do remember, I guess for lack of a better term, the enthusiasm my father showed. Clearly, this was something that was very exciting to him; this was something that he, I had a sense, had a lot of influence on. It was something that was important. And I think that that was an influence, I think that very much was an influence upon my areas of interest, for the things that intrigued me, particularly in the aspects of science.

In fact, I distinctly remember enjoying aspects, being interested in aspects, of science at a very early time. It was certainly helped along by the fact that when it came to scientific things, gee, I had this family, both mother and father in particular, that could be very helpful in terms of getting information, setting up interesting experiments associated with things going on in school. Certainly, in grade school I'd do—I'll always remember in the sixth grade we had to come up with some kind of science project, and so I did one which at the time just seemed fascinating to me, and it's pretty straightforward. My father was able to get some blood agar plates. Essentially, they're Petri dishes with agar in them that are used by the microbiology laboratory for doing routine culture analysis. And he got me a whole slew of those things, and we went around culturing various things, like the drinking fountain, you

know, and doorknobs, and those types of things, and seeing what would grow on them. I was just fascinated by that.

I was fascinated by this aspect of what was, I guess, a form of medical science: microbiology. I mean, the opportunity to learn about Gram stains and doing some of those things was very much a big hit. And it stuck with me even after those Petri dishes had gotten several weeks old and started taking on a certain stench [laughter]. I still found that stench to be fascinating. So there must have been something there that was having its influences on me. Even when it was time to throw the dishes out, there was still this hesitation to throw away. There was something more to be learned, I guess. So I think the influences, particularly in the areas of science, biological sciences, came along through that.

Certainly, I don't necessarily remember, you know, specific books that were out there. I do remember taking peeks in the anatomy book, but that was always kind of on the sly. That was probably a little later age. Some influences there. But, certainly, the aspects of biological sciences I think were a very heavy influence, and, again, not one that was direct, but by taking some opportunities that were there, because of the expertise that certainly I was in the environment around. And I guess there must be something to inheritance or, you know, genetics, in that I think maybe there was some aspect of my natural inclinations or interests going that way.

But that continued on, certainly, as I said, through grade school, through junior high school; some opportunities I also had in high school to do some other experiments. My father was able to somehow get us some hatching chicks, and we set up a very basic experiment of injecting testosterone into one of the sets of chicks and, you know, having the others as controls. So some things that—I guess I had some influences and some assets that helped with those influences going along. So certainly the aspects of doing—I can remember in junior high doing various experiments and just being fascinated by going through the process and then writing them up and, you know, kind of documenting what had gone on.

So I saw for myself taking shape some aspect of something involved in the biological sciences or something involved in aspects of medicine. Career day in junior high it must have been eighth grade—I remember they went through the process of trying to help you learn how to put together a basic résumé. I forget exactly how they set it up, but I had a way of getting a series of careers that one would be interested in. I knew at that time that definitely I was not destined for medicine, but veterinary medicine was fascinating, I thought. So for a while there in junior high I thought I was going to take my muse from the biological sciences, and develop that into something that was going to be caring for patients of a sort, I guess, but of the more hairier kind than at least most humans that one comes across. So I think those were some of the developments.

I was interested in aspects of medicine, but still with some, I think, real interests that were continuing on in aspects of biological sciences. In high school I had a job washing dishes in a medical laboratory, so it was actually washing Petri dishes and tubes and that kind of thing. Now, admittedly, I didn't learn too much of what was going on around the corner in terms of the various laboratory tests, but I had some sense—and, you know, learned by osmosis some aspects of what was going on with that; and I think had a certain fascination. But my forte was washing the Erlenmeyer flasks and those types of things.

But, then, I also had some opportunities to get some other exposures in high school that, I think, had me thinking towards, again, aspects in the biological sciences. I think before I went off to Oregon State University, where I did my undergraduate training, I thought that probably I would end up going to medical school, because I saw that a medical school training was going to be good no matter what you ended up doing. If you were going to go ahead—and this, again, I think was very much influenced by at least my perception of what my father had done, and some direct talks with him. Although I think medical school wasn't necessarily his first choice in terms of what he wanted to do, I always got the impression that he never regretted medical school, medical training, because it had such a powerful influence on having an understanding of medicine and patient care issues and how his interest in biochemical sciences could have such an impact there. And that was, I think, very much an influence, that I thought, "I don't know exactly what I want to do when I grow up, but I think getting a medical education would be an important part of that."

So I went off to college not planning to do premed, because my feeling at the time was, going off to a large university like Oregon State University, that premed was sort of going to be a little bit too much of a—kind of a cattle run, you know. You would have all these big classes with all these people in it, all of them trying to outdo the next guy, you know, to get into medical school.

And there was also the concern, of course, that if I didn't go to medical school, what would I have? I wanted to make sure that whatever I did during that four years of undergraduate training came out with some kind of degree that would be a stepping-stone for a variety of other ways that one might be able to go. So I ended up being a biochemistry major. Um-hmm, I wonder where that influence came from [laughter]. And I think that was completely under my own decision. In fact, I pretty much know it was. I'd not had a lot of biochemistry, per se, in high school, but the concept of chemistry certainly was there. I enjoyed chemistry, and the idea of learning about the chemistry of life was fascinating to me. And I certainly felt that it would be a good stepping-stone towards medical school, but that also it would be a way of getting good training that might very well take me on a different path, a more research-oriented path.

And I very much enjoyed my biochemistry major. The nice thing was that, being a biochemistry major, I was taking the major level classes, which meant they were definitely smaller sizes, and, frankly, they were more intensified, and I think I very much enjoyed that. It was the majors' organic chemistry, and, certainly, the majors' biochemistry course that I was taking that was just fascinating to me. I very much enjoyed aspects of what was going on with that.

And I think started to get a better understanding, as a result, of some of the things that my father was involved with, not only in terms of aspects of his research, but also got, I

think, a better understanding of the interest that he had in teaching, and certainly teaching these types of subjects, which, in my mind, were fascinating and, again, had this link. You know, seeing the chemistry of life obviously had an important link to aspects of medicine, and that was very fascinating to me.

And what developed during my college years was this idea that I would want to somehow be involved in what was happening now and what was really starting to be an early revolution, I think, in many ways, with what was going on in molecular biology. I remember at the time, biochemistry, molecular biology, you know, what's the difference there? And I'm not sure I still completely understand what the difference is, but this was a fascinating time, when there was a better understanding of how disruptions in normal biochemistry were now being manifested in actual overt diseases. And so that was very fascinating to me.

And, as a result of some opportunities that I had to do some research in my father's lab one summer, as well as in another laboratory during my—actually, I guess that was more into my medical school years. But going through undergraduate, I really realized that, yeah, I was interested in medicine, but that I saw myself as doing something in an academic way. When I started medical school, it was definitely not with the idea of going out and being the family physician out there in rural Oregon or anything like that, that I saw myself as—whatever it would be, would be something somewhat more academically oriented, although very early on realizing that it was probably going to have more direct patient contact than at least what my father was involved with in his career, but still some aspects of academics and taking these areas in biochemistry and molecular biology that fascinated me, and somehow developing them towards something that would have at least some aspect of an impact on patients.

I certainly do remember, though, through that time periodically, on weekends when the family would be out driving around, stopping off very quickly out here in front of what is now—I guess it's now Mackenzie Hall; it was one of my father's earlier laboratories, I remember—and going in, and he was checking on one of his machines, making sure it was working correctly. So I got some sense along the lines that this was a commitment, not just nine-to-five, but really almost a way of life, if you will. It was something he clearly enjoyed, and that was exciting, the idea of having a career that, yes, would have an impact on maybe what you were doing on a Saturday, but, still, that was in many ways a very exciting aspect of that, even if I didn't understand what all these multitudes of test tubes running around in this machine were exactly involved with.

ASH: So that was pretty early?

JONES: That was pretty early, yeah. I'm kind of taking a step back, I guess, at that point. But I think that was an influence that kind of comes up as I go through these things.

ASH: At the same time, did you see that he had time to do other things as well?

JONES: Oh, sure, yes, definitely so. I think that was one of the things that I saw,

that although my father clearly was very dedicated to his career and to aspects, that he was able to devote plenty of time, too, to the family for things that were not directly related to his work. He remains a very avid skier, although I think he has a little less opportunity to get on the slopes than he used to.

And, certainly, if there was ever a direct influence on his kids, it was probably influences with skiing rather than, necessarily, their aspects of career. I remember very early on going with my brothers and my father up to Mount Hood and skiing, and that, clearly, was something he very much enjoyed. I realized that probably my level of love and enjoyment of it was never going to be quite as keen as his, and, certainly, my abilities on the slopes were never going to be quite up there, that it certainly was an enjoyable thing. And I think if there was, you know, sort of a family sharing type of thing, that it was very much going up the mountains and coming back, you know, that time, as well as on the slopes themselves, that had a lot of influence.

Certainly, other types of things, you know, around the home, and that type of thing, the tree-house-built-in-the-back-yard type of things, those little projects that were always very interesting. My father took on projects with a lot of energy, et cetera, and was usually pretty good at including the kids in there that wanted to be included in there—although the principal goal of the project was not necessarily getting the kids involved in it, but whatever the object was to be built was the principal goal. And so I think the kids, us kids, myself and my brothers, learned a lot along the way with that.

ASH: Well, now, let's go back to college.

JONES: Okay.

ASH: And you're making the decision about what to do about medical school. Somewhere along the way you got away from thinking about veterinary medicine, even though it was available at Oregon State.

JONES: Yeah. I'm not sure exactly how that happened. I can't think of a specific animal bite or anything like that, that influenced it too badly.

No, I think that—again, I continued and, in fact, even further developed this just fascination with science, particularly biochemistry. The aspects of science that related to life in the biological sciences I think were very strong. I very much enjoyed genetics. I found genetics to be fascinating, because here was a link between something happening at the very basic biochemical level—be it a change in DNA or the outcome in that change in DNA, in terms of how a protein was now made or how regulation of expression of other genes would be influenced—and that abnormalities there could be translated, then, into some aspect of medicine.

So what happened, really, very much in college was, I think, this realization that it was genetics that was fascinating. Being able to be involved in aspects of trying to better

understand how changes at the genetic level could be manifested by aspects of disease in specific patients fascinated me; and that's what I started to kind of look towards, and saw myself as going to medical school and then undoubtedly doing something related to genetics after that. I wasn't clear exactly what that was going to be, but that, I think, as I was going into medical school, clearly was genetics. Genetics was now the muse that was calling me forth to continue on with that.

I had some opportunities, as I said, to work in some laboratories, not only my father's lab—where I was involved in a pretty straightforward project looking at fetal hemoglobin in dogs, so it was learning some of the techniques on how to look at protein structure. And, again, that was great, because it was a way of looking at chemistry, essentially, and trying to better understand how that might have an influence, or at least how that related to aspects of physiology, in this case the fetus of the dog.

But I also had some other opportunities to look at aspects of immunology. I was in Marv Rittenberg's laboratory for a summer. This was actually just before medical school, come to think of it. It was just before medical school. But, again, it was something that had some real influence on my saying, "Yeah, I think something in academia." Although I enjoy people and enjoy the idea of interacting with patients, something that was going to have some aspect of research, particularly, perhaps, some aspects related to genetics, was a very strong influence.

As I was going through college at Oregon State, of course, I had to think, "Well, you know, it's not for sure I'm going to be going to medical school." My grades were pretty good, but you could never count on anything. So I certainly did look into other ideas, other alternatives, and it wasn't like, "Oh, well, if I don't go to medical school, I'll finish my master's and my Ph.D. in biochemistry and sort of do, you know, classic biochemistry work."

I was fascinated at the time by aspects in biomedical engineering. One of the thoughts I had—I was looking at a program in biomedical engineering that was just actually in its infancy at Oregon State, and thought maybe that would be the way to go, taking, again, some aspects of a knowledge in biological sciences but applying them in ways that could, again, have a direct impact on patients.

So I think that a lot of my thoughts continued on very much in aspects of having an influence on other people's lives, either directly through the care of those individuals as patients or through aspects of research that very much had a—well, maybe it's unfair to say *practical* nature. But I guess one of the things that came on through aspects of college and medical school was that as fascinating as research was, the whole aspect of...

[End of Tape 1, Side 1/ Begin Tape 1, Side 2]

JONES: ...It would have a real impact on people. So I think that was sort of an understanding, that if I wanted to do research—and I definitely wanted to—it was going to be

something more than simply identifying the next, you know, enzyme that did this in some obscure pathway, but really something that would perhaps have more of an influence on individuals.

ASH: So why OHSU for medical school?

JONES: Well, yeah, good question. It was a little bit—it goes back to, why did I go to Oregon State? Why didn't I leave? Well, I was pretty happy in this place. I definitely felt, going to college, that I wanted to get away from home, but I had this feeling that I didn't want to get *that* far away, you know. There were advantages to having family around, and I had a number of good friends that were going to Oregon State. So it made sense from that standpoint. It was far enough away; it was, at the time, you know, fine. It certainly wasn't, Harvard or anything like that, but it was going to be fine for what I wanted to do. And I think there was an aspect that it was going to be safe, it was a safe type of thing. It's not too far away; it's in surroundings that are pretty familiar, with people that I know; and that, I think, was a real advantage.

When it came time to look at medical school, my thought was, well, being a resident of the state of Oregon, my best chances are probably to get into medical school in Oregon. So I looked at two medical schools. I looked at what was then the University of Oregon Health Sciences Center, and I also thought about some place called Duke University. I really didn't know anything about it, but Duke sounded good. Durham, North Carolina. Little did I know later how that would have been the dark side of the horse. And I did my interview interviewing at an institution where your father is involved was always very interesting. I knew some of the people on the interview committee from interactions through my family, so that was interesting.

I set up to have an initial interview with a representative of Duke University somewhere here—which I canceled after, because I said, hey, I might as well go to an institution that I had some experience with through my family's involvement up here, and through my own involvement through some of the things I'd done, in my opportunity to do a little bit of summer research. So it just felt comfortable. I think it was an aspect of it that felt comfortable. I had a roommate, a college roommate, that was going to medical school, and so there were people that I knew actually pretty well from my college days that I would kind of continue on with.

So I think there was an aspect of it was safe, it was straightforward. You can debate about—medical school is challenging no matter where you're going to it. My thought was, why add in the challenges of moving away somewhere? So, hence, I can say that I was fortunate enough to get my first choice, just about only choice, for my medical training, and certainly have not regretted having gone through that process.

ASH: Was there a downside of having your father so involved up here?

JONES: I didn't feel that there was at the time, certainly. You know, there are

always trepidations about medical school. Gosh, you know, medical school is—I've worked real hard to get in, but, now, that doesn't mean I can coast. Now, you know, the work just escalates, because I want to do what's right. Plus, you now take people who were overachievers and at the high end of the curve in their various colleges, and you throw them all together. It's a whole brand new curve. So there were challenges and, I guess, trepidations associated with that.

I came into it being a major in biochemistry, and that gave me a lot of confidence, because I knew—talking to my father—that for many people starting in medical school one of the first challenges they came up against was biochemistry. It was probably the first big course that one had in medical school; and, particularly for people that had not had much biochemistry going through their premed training, it could be pretty tough. I was a biochem major. I'd been through all this stuff [laughter]. It was the same textbook, essentially, that we'd had before. So it was nice in that—although I won't say it was a breeze, it was nice that I certainly didn't have a lot of fears or concerns that somehow this was going to be tough to get through. I'd gone through it fairly extensively already. So I think there was something nice about that.

Having my father as a lecturer didn't phase me at all. I thought it was fine. I didn't see that it gave me any specific advantage necessarily, but there was an aspect of it was safe. I was not receiving any special privileges or anything like that, but, you know, I had sat in or had been in the lecture halls up here, so right off, Day One, it was all fairly familiar, and I think that was a fairly positive aspect.

ASH: Was your father chairman of the department at that time?

JONES: He was chairman of the department of biochemistry at that time, was very involved in aspects of lecturing, particularly in biochemistry.

Can I get this [pager]? They keep pestering me [laughter]. [Tape stopped.]

ASH: Yes, going through medical school.

JONES: Going through medical school with my father being, you know, not so much chairman of the Department of Biochemistry, because other than going through biochemistry course, that doesn't have too much of an influence, in my mind, on the medical student. But the fact that he was involved as much as he was in medical student education—I was proud of that, and I saw it not so much as an advantage for me, but again, it was a comfortable type of environment.

ASH: Did you have any sense for his administrative duties, the transition between teacher and then administrator?

JONES: Yeah, maybe somewhat more so for teacher and researcher, although, certainly, I got a sense of his aspects of needing to spend time with administration. I think if

there was ever an influence that would keep me away from a career highly dedicated to administration in a medical institution, it was probably many of his experiences. He did well with it, I think he was the man for the job, but I'm not sure those are aspects of things that he greatly enjoyed, or that, at least, I would sense that I would greatly enjoy if I were in his shoes.

So the things I admired or the things that I wanted to emulate were probably more related to teaching and research rather than the administration aspects. And I guess I saw the administrative duties that he had were sort of the necessary evil of being in the type of medical-educational-research environment that he was in. I guess there were some aspects of that that he enjoyed, but I didn't really know that—the various politics, et cetera, involved were certainly not the things that had drawn me into medicine or biological sciences in the first place.

ASH: Somewhere along the way, though, in medical school, you decided not to go into basic science?

JONES: Well, I don't know it was so much in medical school that I decided that I wasn't going to—I think I still had this idea that I wanted to get a very broad education in the particular areas that interest me and then be able to make some decisions on exactly how I took those experiences later down the line. And, again, those experiences, I think, broadly ranged around genetics. I continued to have this fascination.

My way of thinking was, biochemistry was the chemistry of life; and that life could be understood—or at least major aspects of what life was, at least from a very biological sort of fashion, could be understood—and that there was this coming revolution, or ongoing revolution of an understanding of it, and that fascinated me, and I wanted to continue in some aspects of that. And so what that translated to in my mind was aspects of genetics: that genetics was, after all, the most direct application of abnormalities that might take place in a metabolic cycle that would manifest itself in a patient, and that was fascinating to me.

At the time, I think it was the fascination of how these things could be manifested in patients, and I wasn't necessarily, right off the bat, taking the next step of: okay, but what do you do about it? Later, what happened—I'm getting ahead of myself a little bit, but, later, what happened is I realized that, yes, it's fascinating to know that a genetic defect in this enzyme would lead to this problem in the metabolic processes within the cells and that that ultimately would be manifested by some clinical syndrome in the patient, but what could you do about it? You know, at the time about all you could do about it is sit down with the patient's parents and say, "Well, there's about a one in four chance this is going to happen again." And, okay, maybe you can manipulate some aspects of the patient's diet and have an influence there. But there wasn't a lot going on then, and I would maintain there have not been huge strides even as of now in terms of what one can do about that genetic defect for that particular patient. And that aspect of things started to influence what I subsequently did.

Going through medical school, I thought genetics was great. I had an opportunity to

go over to the prenatal diagnosis. I thought prenatal diagnosis, that is so cool, being able to evaluate before birth, you know, evaluate for abnormalities and, therefore, be more prepared to be able to do something about it. There was an aspect of maybe if you could intervene earlier, you could do something. People were only starting to even think about the concept of some type of prenatal therapy that would have an influence subsequently on that child. So prenatal diagnosis I thought was very interesting.

And, then, certainly, within that area came a very strong interest in cytogenetics; that is, looking at chromosomes and how abnormalities of chromosomes could be manifested in clinical ways. At the time, it was about the best way that one could see changes in DNA, at the chromosomal level; that is, techniques that were able to allow for fairly rapid DNA sequencing really weren't available, or understanding or being able to visualize those types of things weren't as good as being able to see at the level of these chromosomes: when they condensed together, abnormalities there, and a fascination about some type of abnormality, a deletion of material, translocation of material, going from one chromosome to another—you know, what the phenotype of that patient was—and the symptoms that patient might have.

ASH: So during medical school you worked there?

JONES: Yeah. During medical school I certainly had an increased interest and spent some time working with Dr. Ellen Magenis, and I think that represents an important sort of mentoring type of relationship that I had. Ellen Magenis and the things that she was doing just blew me away. I just thought it was the most fascinating stuff. I could just sit back and just start getting very excited about it, just sitting there. It was aspects of things going on in chromosomal abnormalities, these techniques where you could actually see different bands on the chromosomes and be able to detect otherwise very subtle types of changes that might be taking place. This was fascinating to me.

ASH: What year of your training was that?

JONES: This must have been somewhere between about second and third year. It was prior to a lot of the clinical work that I was doing, so somewhere in that range, I guess, is where that was happening.

ASH: And how did that influence your applying for internship?

JONES: Well, subsequently, in my mind—and I remember talking to my father a bit about this, you know, in terms of residency training because this had now become an age when my father was going through medical training, particularly post-medical-school medical training, pretty much what most people did was a rotating internship. You went out and kind of got experience doing pretty much everything. And by the time—now, this is the early 1980s when I was finishing my medical training. We were already in an age where pretty much coming out of medical school you were already deciding on a fairly significant degree of specialization. At the time, even if you were going to be doing family medicine, that was still, in and of itself, sort of a specialized way. It certainly was not the classic way to get a broad medical education if one was ending up going into research or academic medicine. If family medicine was what you were going to do, you were going to, indeed, go out and principally do primary care.

So it's not that family medicine completely turned me off, it's just that I didn't see myself going that route. I needed something that was more specialized. And so to a large degree it was, "Well, do I go into training in internal medicine or in pediatrics?"

And I think what influenced me was, first, this concept that genetic abnormalities are going to be primarily manifested at an early age; hence, an education or training in genetics is probably going to make more sense for my interest in where I would want to go and what I would want to do with it and where I would subsequently want to be, certainly, spending my patient-care aspects of whatever my career was. But also, probably, the manifestations of what I would be interested in from a research standpoint were going to have more influence, and were going to be better served by, a training in pediatrics than necessarily internal medicine.

Part of it, too, may have been—I always think that medical students are influenced by their experiences in medical school, and that very much plays into when they get that training. My very first clinical rotation—the first two years of medical school continue to be principally sitting in lecture halls and, you know, that type of training. Now, suddenly I'm going to be released into, you know, the arms of medical clinical training. And my first rotation was an internal medicine rotation, and it was amazing. I learned a lot, but I also felt like I came into it such a neophyte that I don't know that I got as much out of it as I might have if I had done my internal medicine training later.

Subsequently, when I'm talking to medical students, I sort of say, "Well, you know, you probably have some idea of what it is that you want to do. Maybe think about doing that rotation, not as your first rotation, but some ways a little bit further down the line. Get a little experience seeing patients, how the wards work, those types of things, before you get exposed to that."

Still, internal medicine was amazing. I will always remember my first day on the clinical service. I was on a clinical service that was going to be on call that night, and, oh, it was just the most—I remember the next day coming home, I was just so pumped, you know. I'd been up most of the night, you know, or at least it seemed like I'd been up most of the night, and I was so pumped on it. It was just very exciting; the whole aspect of clinical patients was just very exciting to me.

But I also found that the experiences I had in pediatrics were very positive. Kids are fun. The dynamics of the family was not a turnoff to me. Most people going through medical school think that kids are fun, but you have to deal with their mothers, you know... Well, that wasn't a real turnoff to me.

So those things, together, made me decide that a further training in pediatrics was

going to make sense, and, certainly, when I went around and did my interviews, I said, "Gee, I'm destined for an academic career, most likely in genetics," and I saw myself as getting a good, broad background in genetics, but in a fairly good, academic type of environment that, hopefully, was fairly strong in aspects of genetics, and that I would see myself, then, subsequently going forth.

Certainly, I can remember—many of the rotations I had, clinical rotations in medical school, had oncology associated with them, and I knew for sure I wasn't going to be doing oncology. No way in the world. I was on an oncology ward at the VA hospital. Great patients, interesting stuff, but, oh, no way in the world I was going to do that. I was on a surgical oncology rotation during my surgery. Interesting stuff. No way in the world was I going to do oncology [laughter], no way in the world.

So that was fine, because I was going to do genetics. I was going to be a dysmorphologist: these guys who describe children who have dysmorphic features and try to better understand what these syndromes are related to in terms of the genetics or the underlying biochemical defects. That was very much a turn-on.

I did a number of electives in medical school outside of OHSU, did a medical genetics dysmorphology elective up in Seattle, which at the time certainly was very, very strong in genetics and dysmorphology—probably one of the leading dysmorphologists was up there. Did another medical school elective at the National Institutes of Health, which was also within genetics. I was kind of going heavy on genetics.

ASH: As a medical student.

JONES: Yeah. And so that was fascinating to me, because it was involved with learning about some of the things that were going on at the NIH, getting some clinical exposure, but also working with a very good cytogenetics laboratory there at the NIH and some of the exciting things that they were doing with new and more powerful techniques to look at chromosome abnormalities. We went up and went to probably what was one of the best medical genetics clinics in the world up at Johns Hopkins and presented patients to Victor McKusick and that, so that was very cool. So, yeah, this was all definitely playing into some interests that I had.

Hematology was interesting at the time; blood disorders were interesting. I remember that I didn't have a lot of opportunity to look at blood smears and those types of things so much through my father, but my mother [Marilyn] was a medical technologist up here and actually was one of the technicians in the bone marrow lab and so was involved in aspects of preparing samples. So I had actually some influences from there. The fascination of hematology.

It was something where you could do medicine, you could take care of patients, and very readily get samples of material fairly easily. All you have to do is stick somebody with a needle and you have blood. You could make smears, stain those smears and look at them under the microscope. And there were a lot of interesting, neat kinds of things in there, in abnormalities of the blood, that were fascinating in terms of how they would manifest themselves in terms of patients' conditions.

Incidentally, by this time—this was now having gone through college and even medical school—I had a much better understanding of what that hemoglobin was, and it was fascinating. You know, here was a fascinating molecule that abnormalities could be manifested in in a variety of different ways.

So hematology was always there as a very interesting thing. Bone marrow was a fascinating tissue to look at in terms of the diversity, in terms of what you could see, and the abnormalities were always fascinating.

ASH: So how did you decide where to go?

JONES: Well, what I decided for my residency training is I needed to go somewhere that was very strong in genetics. One place could be Seattle. David Smith was up there, but he was in the process of being diagnosed and suddenly dying of lymphoma, so that maybe wasn't exactly it.

I remember going down to University of California at San Diego, to see a guy by the name of Ken Jones, a medical geneticist down there. I'll always remember that interview, because I went down there, and, you know, here's this big academic medical center. And they knew that I'd wanted to talk to this Ken Jones guy, so they set me up to talk with him, but they sent me down this street. I went walking down this residential street, stopped off at what looked like just one of the regular houses there, which had this screen door and a dog, you know, asleep on the floor. No lie. This was the dysmorphology genetics office [laughter]. I thought, well, this is cool. Yeah, you know, it's pretty laid back.

ASH: Very California.

JONES: Yeah, very California. So that was neat.

And, then, I was also interested, though, in the University of Minnesota, for a couple of reasons. One, there was a dysmorphologist there by the name of Gorlin, Bob Gorlin, who was doing a lot of interesting things and would be a great influence; and, two, very strong in terms of aspects of academic medicine, academic medical training, as well as in genetics. And, in fact, there was a guy by the name of Edward Unis there who was perfecting techniques of being able to look at chromosomes that were all the more stretched out, all the more numbers of bands—one could see deletions or changes that had taken place.

So I saw myself as going that route: that I would go off to Minnesota. Plus, Minnesota—I was finally at a point where I really needed to get away. You know, I wasn't necessarily trying to get away from my family, but I needed some different experiences. I'd been in Oregon pretty much the vast majority of my conscious life and was set for a change at that point. And Minneapolis, Minnesota, was the furthest place away that I had interviewed, which was not necessarily the reason; it was the last place I interviewed, which was not necessarily the reason; but it was definitely a different place, and it had these strengths that were right up the alley of where my interests were.

So I went off to the University of Minnesota in pediatric training, understanding that this would probably be very good in terms of a good academic environment and that it would probably be easy to get some good mentoring in the areas that I was interested in in genetics; and, indeed, started off my training there doing some time in a cytogenetics laboratory there, getting to know, at least, who this Bob Gorlin guy was—he was a rather strange character but also very quickly being influence by the strengths of the pediatric oncologist, and particularly the bone marrow transplant program that was there at Minnesota.

And about this time things were kind of coming together: I had this real interest in genetics, how genetic abnormalities can be manifested as disease, but what can you do for these patients? Here's this child with this metabolic defect. Not much you can do for that child. Maybe manipulate their diet or tell the family there's a one in four chance of this happening again. And maybe there's a way of being able to evaluate that prenatally.

What I saw very quickly—and this happened to coincide with what was going on with, I think, what was a real revolution in basic molecular biology of cancer—was that, here you could identify defects of specific genes, you could see chromosome abnormalities, and they were manifested in a particular clone of cells, that is, in that cancer that that patient developed, rather than all the cells in the body. And, yet, still there was this aspect of connecting what was happening at the genetic level with what was having a clinical influence on individuals. And that was a real hook.

So it was a continuation of this fascination in genetics and cytogenetics, but now in an area where you could have potentially much more of an influence on what you're able to actually do for that patient; that is, treat them for their cancer. There was also a lot that was going on in terms of a remarkable improvement in survival, particularly for children diagnosed with malignancies; and that was a big hook.

And, particularly, the mentors, the type of people that were involved with pediatric oncology at the University of Minnesota, I think were very strong influences. By the time I had gotten much more than about a year or so into my pediatric residency training, genetics was pretty much falling out the door pretty quick, with now an interest in pursuing a further training in pediatric oncology; still with the idea of continuing on very much in a researchbased type of career, but now taking those interests in cytogenetics and chromosome abnormalities and applying them to this fascinating area, where so much was going on in terms of increasing the understanding of the basics of the genes involved in cancer. And that was a big hook for me that was definitely helped along with these experiences in Minnesota.

ASH: Now that you've had the opportunity to be somewhere else, when you were there, how did the people in Minnesota look on, from the outside, then, at Oregon?

JONES: Well, there were not a lot of people there in Minnesota that knew Oregon that well. Actually, a very good friend of mine, who was in my medical school class, who had recently gotten married to my former girlfriend, was going out there, so these were people I knew and got along well with, and they were about the only real Oregonian types.

I think folks that I talked to a lot about the institution out here didn't necessarily have a lot of experience or knowledge of it. The people in cytogenetics certainly knew of the work of Ellen Magenis, because her work, her laboratory, et cetera, were very well known. So I guess it was some of the particular areas of my interest, genetics, cytogenetics, that probably—at least in the people I talked with, in the realms that I was primarily involved with—seemed to have its highest degree of recognition. My father certainly had some recognition outside of the institution because of the things he had done—particularly in research, as well as being a department head.

If I talked to people about where I was from, the fascination was, I believe, more in Oregon and how beautiful it is, and, "It rains there all the time, doesn't it?"—rather than necessarily the institution.

The institution, as I said it was a good place, it was a place where I think I got good training, but it was definitely a place that I wanted—not to get away from, but get a different experience for some period of time. I was off at the University of Minnesota, which was a pretty good academic institution at the time, and continues to be. And I think that one thing about academic institutions, they tend to look inward and sort of at the next tier up, rather than necessarily worrying too much about how they compare with who would might otherwise be their peers, or even if their perception of it is one lower down. So I think a lot of people in Minnesota would tend to look at sort of more "high-powered" academic type of institutions or, as I say, look internally, inwardly on itself, rather than necessarily have too much interest in, necessarily, the specifics of the institution I was coming from.

Certainly, I would maintain that—wherever I went, as I always think of it, the University of Oregon Health Sciences Center had, I think, aspects of respect, certainly in terms of aspects of clinical training. I think its strength has long been in aspects of good primary care training, and so it was recognized as that. And, certainly, more recently it certainly is becoming renowned or well recognized as an institution that's having remarkable growth that's going on.

So I guess those would be some of the aspects. I didn't do a lot of talking about where I came from. I was doing more talking about where the heck I was going.

ASH: All right. So where were you going?

JONES: Well, here I was at Minnesota. I was getting turned off to medical genetics but very much turned on to pediatric oncology and bone marrow transplant, and how this might be a way of dealing with oncologic diseases, with genetic diseases, a whole variety of things; but also realized that I probably was not going to be able to stay in Minnesota for my further training. There were, like, six people in my residency group alone interested in pediatric oncology, almost unheard of. And, to a certain degree, I was getting tired of cold winters. I mean, you know, I hadn't spent a lot of time...

ASH: How many winters did you go through?

JONES: Well, I went through three winters in Minnesota, which isn't a lot, but one, you know, is probably enough. I always remember five below zero feeling very warm. It warmed all the way up to five below. I can remember opening up my jacket and feeling the warmth.

Now, I met my wife there, a Minnesota farm girl, you know, who was actually...

[End of Tape 1, Side 2/ Begin Tape 2, Side 1]

ASH: It's February 1, 1999. Joan Ash and Linda Weimer are interviewing Dr. Gary Jones in BICC 513, and this is tape two.

We're in Minnesota still.

JONES: Here we are in Minnesota, yeah.

So, very much interested in aspects of pediatric oncology; the role of bone marrow transplantation in dealing with oncologic as well as other types of physiologic metabolic diseases; and continuing with this interest in cytogenetics; that now, when I was looking for further training, I said I definitely want to get training in pediatric oncology.

I didn't necessarily want to stay in Minnesota and didn't necessarily know that I was going to be able to stay in Minnesota, so I took a fellowship training program at the Children's Hospital of Los Angeles. This was going to be very positive, because there was a guy there doing what I thought was fascinating research in some aspects of looking at cytogenetic abnormalities as they related to what were then referred to as recessive oncogenes or tumor suppressor types of genes.

And so off I went to Los Angeles, taking my family of my wife, Susan, who I had met there, and our firstborn son, Michael, who had been born in Minnesota. And that was a bit of a culture shock, going from Minneapolis to Los Angeles. But, again, it was a good training program, very intensive clinical training program; but also with some good opportunities to pursue some of my research interests, or develop some of these research interests that were there.

I didn't really like L.A. a lot. I mean, you know, I could remember some of my previous days in Southern California from when my father was at Cal Tech. We were living up in Pasadena. But particularly where we were living, which was just right near the Children's Hospital of Los Angeles, was kind of east of what is sort of the downtown area of Hollywood. It's not quite East Hollywood. Not the nicest area. It was always very interesting, seeing what was going on around there, that's for sure. Kind of just about at the confluence of Sunset and Hollywood Boulevard.

And my clinical training, I think, was very good. It was not a well-established bone marrow transplant program, so some of my interest in bone marrow transplant kind of went down the side; but also, although my initial start in research was a little bit haphazard in terms of getting into the right laboratory with the right personality cliques and those types of things, it did eventually happen. And so my research interests were continuing to be very much influenced and spiked along with the mentoring I had at the Children's Hospital of Los Angeles. A guy by the name of Buddy Weissman, who was head of the laboratory that I was primarily involved with, was a real great guy; and he was a Ph.D., but he was able to deal with these physician types, these M.D. types that actually wanted to do research. Kind of a strange animal, in his mind. Still thinks it's a strange animal. But he was willing to put the time and efforts into trying to make that work, which I greatly appreciate.

So did my training and got some interesting research experience there, trying to get a better understanding about genes that prevented cancer from happening: so rather than genes that became defective and themselves, by that defect, caused the cancer, these were genes that were normally inhibiting aspects of how cells became cancer cells. I was trying to better understand what those genes were, how they had their influences and get a better understanding of how they worked; and I was able to continue on and develop further techniques in chromosome analysis. So this was a continuation of areas that I'd had an interest in.

ASH: Were you full-time, then, in the lab?

JONES: Pretty much the second and third years of my fellowship the vast majority of that time was spent in the laboratory. There was some time in the clinics, but really focused on what was going in the laboratory. And I think I got pretty good advantage and exposure to that. But, then, also, at the end of my three years decided I really didn't want to stay in Los Angeles and took advantage of what was then a new program at the University of Cincinnati. So, again, another aspect of picking up and moving on.

What was recognized was that it's difficult for classically clinically trained individuals, particularly people clinically trained in pediatrics, to get good experiences in a well-mentored type of environment and continue on with getting the research training that they need. It was clear that a three-year fellowship in a subspecialty such as pediatric oncology was certainly not enough to get the type of research background that would allow one then to go forth and get NIH funding and, you know, have an independent laboratory.

ASH: But this was three years on top of a three-year residency, so it was six total.

JONES: Exactly. So here's my three years of residency, now three years of

fellowship training. You'd think I would have had enough schooling by then, but, no. And so what I did is, I took on what was called a William Cooper Procter Research Scholarship Program at the Children's Hospital of Cincinnati. It was a way to continue in a pretty well-structured and mentored environment to get further research training, with the idea, therefore, of making me more viable once I am out on my own—frankly with better pay than it would have been if I had spent a fourth year of fellowship training. And it was a way of getting out of Los Angeles, where I really didn't want to spend too much more time—because now I was looking at, what do I want to do in terms of a true career, and where do I want to spend that time.

ASH: Did you have any thought at all of getting a Ph.D. like your dad did?

JONES: I really did not. I had thought about it some, but thought that I didn't really know that I wanted to spend the time, particularly outside of a clinical type of environment. I think I saw that what I was doing going off to Cincinnati would be a way of getting some of that research experience without going through a lot of the rigamarole of getting a Ph.D., although with the downside of not having those extra letters behind the name. I remember talking to my father about that as being a potential downside: that if you really want to get more research experience, maybe consider doing something in a master's or in a PH.D. type of track where you get through it and then have something to, you know, show for that time and effort.

And my thought was, well, that's not really the route I want to go. I wanted to keep it in a somewhat more clinical environment—and I thought at the time that Cincinnati might be a nice place to spend some time. It was a very good children's hospital, a good academic division of oncology that was there. And, actually, it was a very enjoyable time, three years in an environment that...

ASH: This was three more years?

JONES: This was three more years, yeah.

ASH: Nine years, then?

JONES: Yeah, we're talking about nine years of training, essentially.

Now, some of it was also, though—I was able to do some clinical time on the inpatient service, and that was really more as an attending physician. But I didn't have to devote all my time to clinical care. That was relatively minor in terms of my responsibilities. Much more time spent in a laboratory, in somebody else's laboratory, developing other techniques through developing other projects, with, hopefully, the idea that then I would be able to go on more on my own.

And this was enjoyable because I ended up in a laboratory that was involved with doing, essentially, genetic engineering, doing what was called transgenic animal work.

Essentially, one took fertilized mouse eggs and injected in them one's favorite DNA. Some of that DNA was incorporated into that mouse embryo, and, when you implanted it into a mother mouse, you could actually produce animals that were genetically altered by putting in whatever your favorite gene was. That's a fascinating, extremely powerful technique; and I was able to use it in some collaborations with some other people outside of the particular laboratory I was in now, to look at what I felt were going to be some interesting oncology or cancer-related issues.

I was able to get a hold of a transgenic mouse line that had been genetically engineered so that a specific gene caused these animals to form breast cancers, breast tumors. But these animals with breast tumors had a very low rate of metastasis: spread of the tumor cells to other parts of the body. I was interested in looking at the involvement of a specific gene called urokinase, which produced an enzyme which could help cells break down—not so much break down other cells as much as break down the proteins that were in the spaces between cells. Hence, there was reason to think it might actually increase the propensity of these tumor cells to be able to metastasize. So we made some genetically-engineered mouse lines and—this is where I learned to truly hate rodents, you know—and bred all these hundreds of mice to do these experiments with these mice, forming tumors and then trying to evaluate them for metastasis.

And I think the epiphany that came out of that was the realization, at least for me and I could see it in other people too—I was going to have to make a decision in terms of whether my career was going to principally be devoted to basic science research, where I would be spending the vast majority of my time doing that, better than 75 percent of my time, versus a career that was going to have much more clinical patient care aspects to it.

And I think, for a variety of reasons: some of them being the fact that I didn't really particularly enjoy writing research grants—I haven't really met anybody that does enjoy it but also that I really did enjoy patients. I enjoyed interactions with patients; I enjoyed patients, the family dynamics. I was able to get enough of experience of that in my time in my fellowship training and in Cincinnati to realize that I wasn't going to be able to pursue a basic science career that was going to have to be done at the expense of not having those patient interactions. Maybe it's because I'm essentially a short-term-gratification kind of a guy, I don't know. But I decided that, well, what I would try to do at the next step of my career was definitely to attempt to have my own laboratory and continue with some of these science projects that I had set up, but it definitely was going to have a significant component of patient care involved with it.

So after my final training was done with, after these three years in Cincinnati, I now was looking to see what I was going to do when I grew up—putting off growing up as long as I could—and back along came one of my previous mentors. Buddy Weissman, who had been a mentor and whose laboratory I was involved with when I was in Los Angeles, had now picked up and moved to Chapel Hill, North Carolina. He was saying, "This is a great environment, they're looking to recruit and expand their pediatric oncology. This would be a great place to come and do what you're doing." And I said, "Bingo. This would be

wonderful."

And so, really, it was based upon my previous experiences with Buddy Weissman, which had been very positive, and a nice environment. Cincinnati was nice enough, but it wasn't Chapel Hill, North Carolina. I, essentially, took on my first real job, if you will, as an assistant professor in Chapel Hill, North Carolina, and took with me all my hundreds of mice. That was an interesting [laughter]—oh, yeah, it was amazing. These guys in Chapel Hill were nice enough to actually lend me—they just threw me the keys to this little minivan. So I drove I don't know how many hundreds of miles—it's several hundred miles from Chapel Hill, North Carolina, up to Cincinnati—and then one fateful evening filled the whole back of this minivan with these mouse cages. Now, they were fresh mouse cages, but, you know, there were several hundred mice in the back of this minivan. Driving away the next day—I had to make this marathon drive, and periodically, about every, oh, eighty miles or so, I was stopping and retching a little bit on the side, you know, for what was going to be a real career.

And I did find that it was difficult. You know, basic science research really takes dedication, and you can't let yourself get distracted by things like patient care [laughter]. And I found that it was the patient care things that really were very fulfilling. Again, perhaps it was short-term gratification. You go, you see a sick patient, you do some things, the patient gets better in something measured in a few hours or a few days or at least a few weeks, whereas, gosh, you know, in science you set up and work on projects that can go on for years before they come to fruition.

And although I had my own laboratory there and pursued some of the work that I had initiated when I was in Cincinnati, it became pretty clear to me that I was going to be making the choice more along the lines of patient care and setting up collaborations with people with well-established laboratories to get that aspect of what was going to be going on with science.

Again, there continued to be this interest in how do you do the translation—what is now called translational research: how do you take what's happening in the laboratory and apply it to what's going on at the bedside, and vice versa? How do you take the experiences of what's going on in the clinic with patients and somehow make sure that those clinical aspects, those—oh, what I guess I would call practical aspects—I've got to watch out what I say around Ph.D.s—how do you get those into what is going on in the laboratory? The research scientist is working on what may be to many people an obscure, abstract aspect of science. How do you bring in what's happening in the clinic to somehow influence how that research goes on? And so I was excited as being part of that.

If I'd realized, though, through my time at Cincinnati that I probably was going to be more in collaboration with others, rather than directly in my own laboratory—certainly, I was very happy in Chapel Hill, a wonderful place, great people there, but I had always looked back: that at some point I'd come back to a place that I really had always considered home. After I had left for medical school I periodically came back, and it seemed like every time I came back to visit it would be one of those beautiful days, the sun was out, you know, the mountain was out, there would be some festival going on down by the waterfront; and I can remember thinking, "Why did I leave this place? What was going on in my mind?" Maybe if I had visited more times when it was raining, that would have an influence.

And I'd always kept in contact, or kind of kept up to speed what was going on at the institution as a whole: particularly within aspects of the hospital and how it was developing; particularly the aspects of pediatrics and the whole political football of the new children's hospital, which was being discussed—gosh, when I was a medical student here—and had continued on; and, then, with some major changes that had happened here at a variety of levels, all the way from the top of the office of the president; but particularly in terms of a new department chair in Pediatrics and in the changes that he wanted to bring about in the various divisions, particularly within Pediatric Hematology/Oncology.

Mixing all those opportunities, particularly with the fact that the new children's hospital was finally going to become a reality—they were incentives that were too much of a temptation to pass up. So I will remember the fateful day when I saw that they were recruiting in pediatric oncology, Hematology/Oncology, here and realized that, although it might not be the time for me to move, it would be crazy not to look into aspects of it. And what happened was that the people that I met here at the time—it was very exciting. This place had—as I said, I'd always recognized the fact that it was growing, it was changing, that new things were happening, but it was really neat to come back here and sit down and talk to a variety of different people and really see how this place had changed.

I remember the first time coming into this building, into the BICC, just going, "Wow, this is an amazing place," all the very exciting things going on in biomedical research, talking to a variety of people in health informatics, just really getting very, very buzzed on those types of things.

ASH: When was that?

JONES: This was, like, 1995, I guess. I think that's when I first became aware that they were in the process of recruiting. Before that time, between medical school and about the mid 1990s when I came back, I would sometimes come up to the Medical School and kind of take a quick look around and maybe talk to a couple of people; but maybe I really didn't spend too much time getting a sense of what was going on here, because, gosh, I was somewhere else. At that time I hadn't really always looked back at this as the place I was necessarily going to be coming back to. But being able to have the opportunity in a recruited type of mode, it was very exciting. I was just very excited about what was going on up here. New things, new facilities being built up. A lot of the people I knew from before now were very excited about where things were going. The new children's hospital was going to be a great opportunity, as well as just all the growth and change taking place within pediatrics, and particularly within pediatric oncology. I really saw it as an opportunity, certainly my last opportunity for a while, to be able to come back to Portland, and the best opportunity to come back to Portland that was going to present itself for a while. And so I had to really do some strong thinking: "Gee, you know, I'm not unhappy being in Chapel Hill, North Carolina. My kids"—you know, I now had all three of my sons; my wife was definitely established there. But I really saw that the opportunity to come back to Portland, to have family close again, which had not really happened for a long period of time, was very attractive. Then add to that the opportunities that were going on from a professional standpoint, and, to a certain degree, the opportunity to kind of start anew one more time, you know. I had actually gone through the process and was granted tenure and promotion at University of North Carolina, so I was able to kind of use that to be able to come in here at the associate professorship level. But there were some trepidations about taking off from a place that I'd had a lot of academic success and going somewhere new.

ASH: You didn't have to bring your mice, though, did you [laughter]?

JONES: I did not have to bring my mice. In fact, I had definitely decided I was not going to bring my mice along. That would have been an intolerable trip across the country. Bad enough with three boys, I tell you.

So that's essentially the process that got me here.

ASH: And what are you doing here?

JONES: Well, here I am an Associate Professor in Pediatrics. I would say that the majority of my time is spent directly with clinical care of patients, primarily patients being treated for malignancies, for cancers, although, certainly, some with other types of hematologic diseases. Certainly, something around sixty to seventy percent of my time is seeing patients and the paperwork and everything involved surrounding aspects of that, doing procedures, et cetera.

Fortunately, a very strong component mixed in with that is teaching. And that's something that I really realized I enjoy a lot and have had more opportunity—well, I had some pretty good opportunities doing that in Chapel Hill, but have continued on with being able to have those opportunities here, and that's something that I very much enjoy at all levels.

So the opportunities to do teaching while doing patient rounds with the pediatric residents, with the third-year medical students that rotate on the service, but also the opportunity to go and actually now give lectures back in my old lecture hall. I now do lectures to the second-year medical school class, but also do lectures to the nurse practitioner program, to the physician assistants program, nurses, et cetera. So I very much enjoy doing aspects of teaching, various hands-on things as well as kind of getting up and doing those types of things.

I guess sometimes it's difficult in medicine to find areas to be creative in, and I think that's one of the greatest things that teaching has. It's a real opportunity to put a creative bent into aspects of that, be it how you design your slides or—how you want to get the material to

your audience. So I see that as perhaps one of the more creative aspects of what I can do, or creative outlets of the things that I do professionally.

Certainly, I'm still involved with aspects of research. It's more clinical research oriented now than, necessarily, basic science, although I have also been able to set up collaborations with people within our own Division within the Department who have wellestablished basic science laboratories and can now do some of that translational research taking things that are going on in the clinics and on the wards and, particularly, doing aspects of basic science research using clinical samples, rather than setting up tissue culture or animal models or those types of things. And so that's an exciting aspect that I definitely came here wanting to pursue, and I feel like now, a little over three years into my time, I'm now finally being able to get the time and the organization and some of the outside funding to help support some aspects of that. So research continues on as well.

I've been able to stay away from administrative issues fairly well, I think, although administration raises its natural—not ugly—head, in just about anything one does. But I certainly have not gone out of my way to find those administrative types of things. My hat goes off to people who are department chairs or who—you know, my father was acting President. My hat goes off to people that want to do that or, if they don't want to do it, are willing to do it. I don't know that I see the advantage.

At some point I had to think about, well, do I want to pursue a career that would have me sort of go up those steps, you know, becoming a division head as a step; and I just didn't see where the advantage comes from the time and effort spent in it. So that has not, certainly, been my way. It may at some point be thrust upon me, but I'm not sure it's going to be something I'm going to be actually pursuing.

ASH: When you were in medical school, you told me, your father was acting President, is that correct?

JONES: Yes. That was during my clinical years.

ASH: What was that like?

JONES: Well, fortunately, now, it was outside of having to sit in lectures and that type of thing. It was during clinical rotations. And I guess I better be careful, you know, if this is getting put down—but, to a certain degree, when you're there in the clinics, at least in a training fashion, it doesn't really matter what's going on in the administration building. I mean, it could be run over by banditos and you wouldn't necessarily know what was happening. So it didn't really have that much of a direct influence.

Nobody recognized me as somehow being related to the guy who is the Department Chair in Biochemistry or even the acting President. So it was enjoyable in that it was yet another layer of administration and politics that I could hear about, but I'm not sure it really had much of a direct effect on anything that I was doing or the people that I was around. I'll always remember, though—my father had gone up skiing, and he'd had some kind of horrendous fall. He had hit his head, and he'd gotten carted down off the hill, I think in an ambulance, as I remember. And I had not gone skiing that day, but I was off with some friends, and my little brother had somehow found out where I was and said, "Oh, my gosh, this horrendous thing had happened." My father had had this accident. And I was, you know, far enough along in medical school that I knew the bad things that could happen. I think we had just finished central nervous system pathophysiology [laughter].

So, here, my father is carted down off of there, and I remember going into the emergency room, and he's totally disoriented, you know, just really kind of post-concussion syndrome. And it was clear that brains weren't coming out of an ear or anything, so he was probably going to be okay, but it was still disconcerting enough. And I really had that sense of a little bit of knowledge can be kind of a bad thing, you know, worrying about what was going to be going on.

I'll always remember the first CT scan, the first CAT scan I ever saw done clinically was on my father's head, and it was one of the few times I felt like maybe I should remind people who this guy is. "He's acting President. Let's get things moving." I'll always remember the CT technician was more concerned about her date that night [laughter], which, you know, in the great realms of things was probably appropriate, but it somehow was, like, "Well, yeah, all well and good, but, you know, here's my father, who just happens to be"—you know. I didn't say these things, but...

ASH: You were thinking them.

JONES: Yeah. But it was an important experience that people going through medical training need to have that at some point, of being put on the other side of the process and having to go through that. You need to do that to be able to have some aspect of empathy for what you're putting your own patients through, or what the institution that you're a part of is putting these patients through. And certainly wasn't the first or the only experience I'd ever had with that, but it certainly is one that sticks in my mind—certainly when it comes to aspects of my father being, you know, the acting President of the place. "Let's get this CT scan done now! Let's get this thing going, here. This isn't just some guy they pulled off the street."

So that was all very interesting. So it didn't have too much of an influence on me, I would say, other than it was interesting—the stories were always interesting, those types of things, but never it really had too much of an impact. People who knew me by way of my father would, you know, sometimes tease me about some aspects of that, but, fortunately, most of the day-to-day relationships that I had were with people who didn't know, and probably couldn't care less who my father was.

I guess there was always some aspect of ensuring that I wasn't too much under the shadow of my father, that I was out there doing my own thing, and that was probably an

important part of the decision-making of leaving after medical school to go on and do further training, and somewhere completely different.

ASH: Well, it's interesting that you and your father had made your careers in academics and Lester, Warren L., and Arthur C. [Jones] were all in private practice.

JONES: Each having some aspect of an input on teaching or some other aspect of academics.

ASH: In what way?

JONES: Well, certainly, my grandfather, for instance...

ASH: That's Lester.

JONES: Yeah...being probably the most obvious or most prominent in terms of his Dental School and Medical School teaching and his relationships up here.

My great uncle Arthur had some aspects, though, in terms of development of rehabilitation medicine in the region, and so although he was principally involved in patient care in private practice, I guess I would say that a lot of the things that he did influenced how rehabilitation medicine developed in the Portland area, certainly. And I though the did some teaching as well, although I don't know the specifics of it. He was certainly well into retirement by the time I was in medical training.

My Uncle Warren, you know, I certainly remember him vividly from my days in Southern California, because that's where he was located. I'm not sure at what point after his training he came down to Southern California, but I think it was fairly soon, certainly, at least—I don't know if he did his training there, but certainly soon after his residency training, I think he came to Southern California. So he was kind of the "California Jones" family. I guess I saw him more as aspect of that, and the cousins that I didn't see very often but were always fun. I guess his influences within the academic aspects of medicine were probably the...

[End of Tape 2, Side 1/ Begin Tape 2, Side 2]

JONES: Everything was through his own practice. I'm not aware that he ever went to UCLA or University of Southern California or any of the academic medical institutions there and had any type of affiliation. So I guess he represented more of the private practice, although it was in psychiatry. That was very different than, you know, my whole mindset about medicine even before I was in medical school. Psychiatry had never been something that had really had much of a call for me. I certainly saw that as an important aspect of patient care, but somehow didn't see it—it was somehow separate.

Certainly, if I was influenced very much by the aspects of the chemistry of life-

although a lot of work has gone on, particularly relatively recently in terms of some of the biochemistry of things like schizophrenia, et cetera—it didn't translate directly. So that was a little bit different. That was a little more foreign to, at least, the influences that I had had, or at least the paths that I was going forth with medicine.

ASH: What's he like?

JONES: He's a very nice guy. He always hit me as somebody who must be from Southern California, because he had that kind of persona. He seemed somewhat probably larger than life. He had sort of the movie star—you know, he's from Southern California, so, of course, he was tan compared to everybody from Oregon who was pale, pale faces and everything. He always seemed like a very dynamic character. Very jovial, very friendly, nice guy. Different than my father in ways that maybe would be difficult to put words to, and so I don't know—I mean, he just seemed very Southern California: he was affluent and seemed to express it more than I was used to within much of the rest of my family. But very jovial kind of guy, you know. I just always thought of him very happy, always smiling, it seemed like, always with that tan, always with the nicely combed hair. It seemed like he was either in a suit or in kind of the typical Southern California tennis garb, you know, kind of flashy tennis garb.

ASH: And what about now?

JONES: Now? I guess he still retains much of that persona that I remember him as, although he's, let's say, a bit more mature now. I still don't have that many interactions. Probably the time that I had the most interaction was when I was in Southern California during my fellowship training, and so would go over and swim in my uncle's pool and kind of interact with him, his wife, Ellie, and particularly my cousin Eric, who is now—I guess he must be in his twenties; could he be in his thirties already? You grow old fast—who I knew fairly well when he was much younger and had a number of interactions with when we were down. And it just seems like lately I've kept in more contact with my cousin than, necessarily, my uncle. My cousin who had gone through training in psychology, and I think had been trained as a clinical psychologist, decided he wanted to go back and get the M.D. and so is now in the process of getting into medical school to purse that aspect. So that was kind of interesting. I had an opportunity with my Cousin Eric coming up and kind of taking him around, touring him around, doing some things.

ASH: Oh. When was that?

JONES: This was, gosh, a couple of years ago, I guess. But kind of going around, had him come on rounds with us, and so some fun aspects, again, of teaching—not really mentoring, I suppose. My cousin Brian Clark, who is my father's sister's son, also now has recently gotten the medical bug and is actually in D.O. school, doctor of osteopathy. But I got him up and kind of gave him the tour, had him see patients, did some procedures with him, those types of things. So that's been kind of fun, not necessarily seeing the next generation—I always saw these guys as somehow in my own generation—but, at least, individuals who

are kind of in an early phase of medical training and, then, their interest in it, having some influences on that.

ASH: And you have three sons also.

JONES: I have three boys, uh-huh.

ASH: Do you see any inclination in them?

JONES: Nothing right now, I will tell you. The eldest is into wrestling and football and has not had any real stated interests in pursuing a career in medicine, nor has the middle one, who also is into his sports, or the youngest one, who's into just about anything that's on TV. It'll be interesting to see.

I think my eldest, who's now sixteen years old, is probably right on the verge of really starting to have some sense of looking into the future: what does he want to do? Right now he would love to pursue some of his interest in sports as a way of, you know, having an influence on where he goes to college and what he does, but in terms of the specifics of what he wants to learn about in college and where he wants to go after that, I think right now he doesn't have a lot of—at least, he hasn't stated a lot of those interests. So it'll be interesting.

I guess I see that the influences I'm going to be having on my kids are not going to be very direct into medicine. I think, in this day and age, a career in medicine, medical sciences, research, has to come from a lot of self-dedication—you know, one has to be pushing oneself. I don't think there are going to be too many outside influences that can force that along. I think the changes that are happening in medicine still make care of patients, the classic aspects of being a physician, very attractive, but maybe less so or in different ways than it used to be, say, twenty years ago. Managed care has made medicine much more of a business than, I think, many people who are initially bitten by the medical bug, perhaps, have wanted to be in the past.

And, certainly, it takes a lot of dedication. It's not the guaranteed great lifestyle that it has been. It's not the guaranteed prestige in the public's eye that I think it used to be. So I think it takes maybe a little more. It certainly has always taken dedication, and that hasn't changed, for one to want to pursue a career in medicine. And I think the same thing can be said for medical sciences, which is very much a career where one is going to have to be doing things—at least if one is in an academic type of institution, where you're going to have to work hard to get the monies to support what you're doing, and that just sets you up to write the next grant.

Things are changing in medicine; things are also changing in biomedical research, where now more and more research is going on within private industry. How is that going to have an influence on the pure aspects of what research has been in the past? I don't know that I have the answers, but it definitely is going to have influences on people in the future as they're making those decisions.

So, I don't know. My hope would be that the Jones tradition of involvement in medicine in some way, shape, or form—be it in terms of research, be it in terms of teaching, be it in terms of practice—I would like to see that not end with myself. But I am not yet convinced that it's necessarily going to continue on, and although I hope to have some positive influences on my kids, it's definitely not going to be something that's going to be demanded of them.

ASH: We haven't talked about your siblings at all. You do also have two brothers.

JONES: Yes, I have two brothers, that's right.

ASH: And we're interested in the road not taken and what it was that made them go into different areas aside from medicine.

JONES: Sure, because medicine was very much a great influence on my father and his siblings, certainly his eldest brother.

In my case, again, I think it was the fact that my father and mother didn't have a real strong push into medicine. I don't think they pushed anybody away; I don't think they pushed either of my brothers away from it, but I think that, for whatever reasons, they did not have the same interests that I had, and maybe as a result of my going that route they decided they needed to do something different. I honestly don't know.

My brother Alan, who is about three years younger than I, I always thought was kind of the bohemian of the family. He was the type B personality to try to round out all the type A's that were running around. His influences were very much more in the areas of the arts, music. He definitely had the talents, or at least pursued the talents, related to music much more so than the rest of the family either had those talents or, certainly, pursued them.

He is certainly successful in the areas of computers today, but I guess I still see that he has his job more as a way to support what he does with his music and those types of interests than necessarily that what he does at his job is his career, that it's sort of his main purpose in life or, you know, the main thing that he's pursuing with his talents. And so in that way I think that he is different than many of the other Jones males, going on for at least a couple of generations.

My youngest brother went into the law, and, certainly, in the Jones family there are people involved in law: my father's cousin Robert Jones is a federal court judge in Portland, and, although I don't think there are, necessarily, any direct influences specifically from him onto my brother, there was that sense in the Jones family that there were other professions other than medicine that one could look into and pursue.

To a certain degree, I think my brothers were not as turned on—I don't think they were necessarily turned off, but not as turned on by aspects of medicine and of illness and of

those types of things. But maybe those had some influences. I know, certainly, that when we get together for dinner I need to tone down discussions about interesting clinical cases that my father might appreciate and even my mother might enjoy but I think would be turnoffs to my siblings.

So I guess they just, yeah, never really took in some of those aspects of interests. So, I don't know that I can completely relate to you what were the influences that drove them or sent them down paths different than what we've been primarily talking about here, but I think both of them are very satisfied, happy—certainly do not look back with regret: "Oh, gee, I wish I had gone into a medical career."

It'll be interesting to see, particularly with my youngest brother, Nils—he has two sons now—sort of where those guys will end up. Maybe that will be the next great brain surgeon, will come from that line of the Jones family rather than my own.

ASH: Now, we do have a few minutes left for me to pursue a couple of other themes that, being more contemporary than some of our other interviewees, you may be able to fill in. One of them is women and minorities in medicine, and specifically, for example, your medical school class. What was the makeup of that class?

JONES: The makeup of my medical school class, certainly in terms of women, was fairly strong, I thought. I couldn't sit here and tell you what the ratio of males to females was, but it was certainly not insignificant—it wasn't like there were three women in my medical school group. I don't think it was half, but I don't think it was too much under half. I would say that, honestly, my experience was that I didn't see a difference in terms of male/female going through the medical experience. I think that some of the brightest people in my medical school class were female and some of the brightest were male. When I was a medical student, and this was in the late seventies, I didn't really perceive that there was a significant barrier to women in medicine at that time, at least based upon my experiences here at OHSU.

It was maybe a little bit different, you know, at the next phase. When we were in medical school and doing our clinical training, it seemed like many of the residents were male, but there were female residents, not only in pediatrics but also internal medicine, across the board. So I guess I'm fortunate enough to have been at a point where I had not really seen that there was a significant barrier to women in medicine. I think already the previous stereotypes of male doctors and female nurses were crumbling significantly at that point.

There was not a large number of minority students in my group, but I think that probably is as much as anything the demographics of the times, of the state and of the city, et cetera. So I guess I had to go through a little more of a sense of minorities and their abilities to access medical training. This was about the time of some of the things that were going on in the University of California system that had a lot of influence on affirmative action in terms of access of minorities. My girlfriend, actually, in medical school was, like, a quarter Native American, and it was interesting to see some of the doors that could potentially be opened for her subsequent training in the things that she did based upon that. I think that I went through a time of training, in my residency training in particular, where there was this sense that something more needed to be done to get minorities—I think when most people were talking about minorities, I think there was this sense, primarily, of African American minorities—into medicine. I went from Portland, Oregon, or, you know, Oregon as my medical school training to Minnesota as my residency training, and, again, this was another environment that was not very strong in terms of the demographics with a great diversity of ethnic background.

So I think that in some ways I didn't see as much of what was going on, but had a sense that perhaps more needed to happen to get at least certain minorities more involved in medicine.

Going into pediatrics—gosh, my pediatric training, I think at least half of the people in my residency group were women, and that's something you definitely see in pediatrics. In fact, now, at this institution the vast majority of pediatric residents are women. In fact, it's the relative rare entity of the male coming through his residency training, at least at this institution. And I'm a little concerned about that. I mean, obviously, we need to take the best people possible, but I would hope there would continue to be a male influence in aspects of what's going on in medicine. I certainly don't think it's to the advantage of anybody or any subspecialty to see too many of one sex or another or, for that matter, too much of one ethnic group or another predominating in the subspecialty. So that's going to be interesting to see where things go, particularly in pediatrics, which certainly, as I have seen it, has taken on a very strong component of females that are going into that subspecialty.

I think that I have seen continued improvements in aspects of access to medical training, be it medicine, nursing, whatever, in terms of improved access to minorities, but it's going to be a struggle, I think. You know, it seems like with aspects of affirmative action, there's a pendulum that swings back and forth, and it seems to be swinging away from aspects of affirmative action, which, certainly, is good in some ways; but I honestly do think we need to continue to be at least conscious of how we can improve aspects of access to medical education by groups that have either been in the past or continue to be underrepresented in those areas. I don't know that I have the answer on how to do it, but I think that's going to continue to be an area that's going to be extremely important.

I honestly think—and, again, maybe I'm just in the area of medicine that's that way, but—that sexual barriers, or barriers to the sex of the individual, have pretty much broken down in medicine. I honestly think that. I don't think that training programs in any places are having problems with aspects of that.

ASH: Another theme that we like to ask people about is space. You're in a unique situation in that you went away at a pretty critical time and then came back. What was the space configuration of the campus when you were in medical school?

JONES: Well, in medical school the campus was very much separated into sort of

the north and south campuses, with the VA being an entity as well but being very separate in a lot of ways, at least in terms of access to that environment.

The newest building that I can remember in my days prior to medical school was what, I guess, now would be the old basic science building, and I remember that as being a very impressive structure: for the time, what seemed to be very modern type of lecture halls, and more research space, which got crowded up very quickly.

I can remember various places where my father had his laboratory throughout this campus, and although each time it seemed maybe looking a little more modern, it always seemed to be fairly cramped, always seemed to be stuffed to the gills with things. And certainly I do remember, and I think one of the classic aspects is, that space, particularly research space, has always been—you know, it's always crowded at almost whatever institution you're at.

I thought the training facilities at the time of my training were good in terms of, as I say, lecture facilities, et cetera, on the wards, et cetera. The wards at the time did not necessarily strike me as being too terribly modern or, by the same token, too terribly out of the times, although the experience I'd had up on the pediatric wards in the previous Doernbecher Hospital facilities, it was clear that something needed to be changed. There was a need for modernization of the facilities for the care of children at this institution all the way back into the 1970s, and it's only been very recently, within the last year, that finally the new Doernbecher Children's Hospital has become a reality and is now open.

ASH: Is that where your office is?

JONES: My office is actually not in the children's hospital; it's in what is now the Hatfield Research Center. And there's another example. I think that, as I was away from this place, I really saw and was very excited about a lot of the building that was going on. The BICC represented a fascinating kind of way of going into the modern age of biomedical information. The building that was put up next door to the basic science building, or kind of the extension of that, the Vollum Institute—I remember the Vollum Institute and being very excited about monies coming in that were all essentially for research and really were going to quantum-leap this institution up into a very high and prominent level of recognition for the research going on.

So those were very exciting. I mean, that's what really said to me, after I had left here, that this was definitely a place where I was going to be very interested in seeing how things went, because it could very well be a very exciting place for an up-and-coming young researcher-type to be able to come back to.

As I said, my office is in the Hatfield Research Center, and that's one of the more recent facilities to go up. And, wow, you talk about fantastic research space. I remember when I came here and was being recruited, they didn't have anybody in that space yet. I mean, you had huge, vast areas of research lab that wasn't earmarked for somebody yet. That was almost unheard of. So it's been very exciting to see.

The new VA hospital: when I was in medical training here, I did rotations at the VA. That was the old facility. That was an amazing place. Now this brand new VA hospital, I think, also represents the fact that there are a lot of resources committed to keeping the teaching facility, as well as the medical care offered individuals, top-notch. All those things are very exciting.

The CDRC building, which always has kind of fascinated me from the standpoint of architecture—I realized that if I hadn't been in medicine I would have done architecture. Architecture is in some other life that I'll have an opportunity with it, some other time, maybe. But the CDRC always fascinated me as kind of being this modern building, and now it's fairly old, and apparently the roof has leaked from the first day there.

So it's interesting to see now—and I can think of a lot of the experiences I had which were very positive and sort of focused me, in terms of ways that I ended up. Now the CDRC building is going to be turned into department and pediatric office space, so things kind of come around. Soon my office will be in the CDRC, probably right next to a bucket from the roof [laughter].

ASH: So, about the new Doernbecher, then. You're obviously spending time in the building.

JONES: Oh, yes, quite a bit of time. It is a fantastic facility. It's very exciting being in that place. Part of it is being able to compare it to where we were before. When I came here a little over three years ago, we were still in the old space, which was almost—almost criminal in terms of the services that could be delivered to families within that type of environment. Four-bed wards with families just all cramped into that; a single bathroom for the entire ward. I mean, things that were just ridiculous, truly ridiculous, in terms of where modern-day patient care and the facilities in order to attract patients were at.

So, as I said, part of the excitement of coming back here, part of the allure of coming back here, was the fact that the Doernbecher Children's Hospital was finally going to be a reality. And so although I did have to, if you will, suffer through, along with the patients—the patients suffering more than I—the old facility, it was probably important to really have a sense of just how nice the new facility is.

I was involved, actually, in the process of development, not of this children's hospital, but of the children's hospital that's still yet to be built in Chapel Hill, North Carolina. So I had some experience with, you know, how you think about structuring patient rooms, and access to nurses' facilities and those types of things. So it was very interesting to then come to this facility and see how one would take a building, which obviously couldn't be built on the ground, you had to span it across, build it in midair, and take certain aspects of space limitations, but use them in ways that really, I think, worked out wonderfully.

It is a state-of-the-art facility; it is a facility that people who are going to be building children's hospitals twenty years down the line are going be coming to this institution looking to see how they do things, not only in terms of the floor space and the architecture, but how do you set up symbols to help families and patients get around, how do you separate how families are getting from one point to another with how patients are being moved from one point to another, rather than having them all spill into each other. So the facility we have now is outstanding and is a perfect joy and pleasure.

The important aspect, of course, for not only this institution but any institution, is ensuring that its policies and its ability to attract good personnel are at the same level as the quality of the facility that they've built. And I guess if there is going to be a concern that I'm going to have, it's: can OHSU ensure that they're going to continue to get good nursing personnel, good janitorial personnel—across the board, good personnel, that are going to be able to continue to provide patient care at the level that, I think, is the highest quality of anyplace I've seen; and, yet, do it in this day and age as the institution is having to make fundamental changes because of managed care and because of other aspects that are going on in the economics of medicine, in how we go about teaching the future healthcare professionals.

Lots of things are changing, and I think it's going to be a real challenge to this institution to be able to make those changes and yet still provide the quality of care that I think people should have the expectation that an institution like OHSU should be able to provide. It ain't gonna be easy. We're going through a process of wondering how we're going to keep the good nurses that we have and find the nurses that we need. Fundamental changes in personnel are coming about that are going to be potentially setting up for difficult times to get through over the next several years.

ASH: Are you predicting shortages in nursing?

JONES: Definitely shortages. There are already shortages of well-trained nurses, particularly for the needs that we have in pediatric oncology. The nursing staff that we have here is outstanding—it's the best I've seen, and I've been at multiple places—but it's difficult to keep those people in an environment where there are other institutions that may be pulling them away. This institution is trying to set itself up to survive in the future of managed care. Policy changes that take place may have an influence on people, how happy they are going to be sticking around at this place. Ensuring the basic things that we take for granted, cleaning out trashcans and those types of things. Can we stay up at the level of care that's needed, the level of service that's needed, while we're trying to very rapidly cut down on the costs of keeping an institution like this going? How do you compete with the private sector when part of your mandate is to supply medical care for the people who don't have adequate insurance?

WEIMER: We're out of the videotape, but you can continue.

JONES: Well, I'm babbling here. I'll tell you, the state of Oregon hasn't come up with how you're going to do it. Many other academic institutions are undergoing even greater cuts than what this institution is having to do, and it's an interesting time to be around watching what's going on and hoping that your own job isn't necessarily going to somehow have to be cut away to try to make this institution—make academic-teaching-hospital-related institutions come into whatever mold they're going to be in for the future. It's somewhat scary times, but certainly always interesting.

ASH: Well, one last question. And I should have warned you that we would ask you this, but we ask everyone to think back. What are you most proud of in your career so far?

JONES: Well, I think I have a great sense of pride of having been able to get to the point where I am, particularly as it stands in regard to patient care. I think that I am blessed to have had the opportunity to go through a process—to be able to get the training, not only in classrooms and in textbooks, but also with my interactions with families—to get to the point where I feel that I can take a situation where a family has had the worst thing that's ever happened to them, the worst thing that's ever going to happen to them, their child...

[End of Tape 2, Side 2/Begin Tape 3, Side 1]

ASH: It's February 1, 1999. Joan Ash and Linda Weimer are interviewing Gary Jones. We're in BICC 513. This is tape three.

JONES: So, we were talking about where I take the most pride, let's say, in what I've been able to do to this point from a professional standpoint. It's that I feel that I am at a point where I can provide for these patients and families the best possible care. And that's not just in terms of the experience with what chemotherapy drugs to use, but I think in terms of the support of being able to get families through the process of this tragedy, hopefully with the outcome that that child that was diagnosed with cancer is cured of that cancer and has a normal life, but particularly, and perhaps even more so, for those instances where the child is not cured and ends up succumbing to the disease; that I have a sense that I can provide for that family—for that patient and for that family the ability to take my strength and my background, which are influenced by not only where I did my training and how I did my training, but who I am and how that's been influenced by my own family, and as well as my own experiences separate from my family; that I can provide the best—nobody does it better. I honestly think that nobody does it better than myself, and I say that with a certain aspect, I guess, of cockiness, but I think with a sense of pride in terms of having been able to get to this point and be able to supply that.

I'm always learning, and I think that that's one of the important things in one's career is, a successful career is one where one is always improving, always learning more. And I have a heck of a lot more that I need to improve on, I need to learn. But I think I'm finally to a point now where I am providing now, if you will, more to society than I necessarily am having to take with, how that training is going. I'm not going to win a Nobel Prize, but I think even more important is the aspect of having families that I will have had an important influence on, hopefully with the cure of that child, but even in those where that hasn't happened, hopefully an aspect of being able to get through that process and come out

of the other end with some aspect of strength.

ASH: That was an excellent ending. Thank you so much.

[End of interview]

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