

SUMMARY

J. David Bristow begins the interview by explaining how his family moved from Pittsburgh, Pennsylvania, where he was born, to Portland, Oregon in the 1930's. Educated in Portland public schools, he entered Willamette University at age 16. He graduated from the University of Oregon Medical School (UOMS) in 1953. Dr. Bristow describes his fellow students, noting that there were many war veterans, few women and a large number of cigarette smokers in his class. He also comments on the medical school curriculum and favorite professors.

Dr. Bristow next discusses his internship at the Multnomah County Hospital. He completed one year of a residency at the Veterans Administration Hospital before he was drafted into the Navy. During part of his two years in the Navy he had a busy practice in obstetrics.

Dr. Bristow then comments on various changes at the medical school during the 1960's and 70's, including opening University Hospital and the resultant increase in full-time faculty. The discussion of Dr. Bristow's medical education resumes with his discussion of completing his VA residency upon discharge from the Navy, a fellowship year in cardiology at UOMS, and a year at the Cardiovascular Research Institute at the University of California at San Francisco. Upon returning to Portland, he became an assistant faculty member at UOMS, teaching medical students, residents and cardiology fellows, as well as conducting research in a newly-funded cardiac catheterization lab.

Dr. Bristow further identifies changes and influences on campus during the 1960's and 70's, commenting on increased funding for research and addition of the Multnomah County Hospital and VA medical programs to the university. Dr. Bristow became involved in administration first as chief of University Hospital South, then as Chair of Medicine following the retirement of Howard Lewis in 1971.

Dr. Bristow talks about sabbaticals he took at various points in his career, particularly a joint study with the Kaiser system in 1975 on health care delivery and process outcomes. He covers briefly his years as an instructor at the Cardiovascular Research Institute in San Francisco, after which he returned to OHSU to run its cardiology fellowship program. Dr. Bristow's oversight of the fellowship program in cardiology is examined, and he provides a detailed description of research he conducted in the cardiac catheterization laboratory.

Dr. Bristow next discusses a number of university issues, including funding and fees for service, town-gown relationships, women and minorities in medicine, building on campus and space concerns, information technology in healthcare and changes in medical training and curriculum.

Dr. Bristow comments on his family life and children, and Kay Bristow contributes to the interview in a discussion of how the two met, the years while David was in the Navy and their relocations at different points in Dr. Bristow's career. The interview concludes with Dr. Bristow's discussion of leadership at OHSU.

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Interview with J. David Bristow, M.D.
Interviewed by Joan S. Ash, Ph.D.
September 16, 1997
Site: Dr. Bristow's home
Begin Tape 1, Side 1

[Editor's note: Kay Bristow, Dr. Bristow's wife, was also at the oral history interview.]

Biographical Information

ASH: I need to begin by saying that we're at the home of Dr. David Bristow, and it is September 16, 1997.

I have several questions that I wanted to ask you. I thought maybe we'd spend ten or fifteen minutes talking about biographical information, because the information that I found on the files and that I have in your CV [*curriculum vitae*], of course, doesn't explain such things as when you moved from Pittsburgh to Oregon. You were born December 7, 1928, in Pittsburgh. How did you end up in Oregon?

BRISTOW: When I was eight, my parents moved to Portland at a time that people who lived in Pittsburgh had hardly ever heard of Oregon, let alone Portland. But they were adventurous folks, and so we moved here then, and I grew up and spent most of the rest of my life here.

ASH: Did you move because your father had a job here?

BRISTOW: Yes. He got a very good job offer, and they just packed up and moved, to the horror of their friends and relatives. Interestingly, most of the relatives would come out in years following, for a vacation and to see what in the world this place was like. Ultimately, they all ended up living in the Northwest.

ASH: A family with very good taste.

BRISTOW: That's right.

ASH: Well, then, prior to your attending medical school, I take it you attended public school in Portland?

BRISTOW: Yes. In fact, I went to four or five grade schools.

ASH: All in Portland, though?

BRISTOW: Four in Portland. I went to Chapman, Laurelhurst, Irvington, Abernethy, and then to Gresham High School, then Willamette University, where I met my wife of forty-seven years.

ASH: Congratulations.

BRISTOW: And then went to medical school here.

ASH: You were at Willamette University during what years?

BRISTOW: Forty-five to forty-nine, so I was relatively young, had not been in the service—I was sixteen—and virtually everybody around me, both in college and medical school, were veterans. So there was a handful of us youngsters. It was an interesting time. We were pretty serious-minded, but the veterans were very serious-minded, as you might imagine.

ASH: You were sixteen, then, when you went to college?

BRISTOW: Sixteen when I went to college, and twenty when I started at the UOMS, as we called it then, the University of Oregon Medical School.

ASH: That seems very young.

BRISTOW: I think moving from the East helped. They assumed in Portland that I had been to better schools and notched me up a grade or two.

ASH: And when you were at Willamette, what was your major?

BRISTOW: My major was biology. I have to confess I was not a serious-minded, directed, driven student early on. It was announced to me in the junior year that I had to select a major, and so I chose premed because it sounded kind of interesting. I did quite well in school, and then, of course, became seriously interested in medicine later on.

ASH: How later on?

Medical School

BRISTOW: Oh, about the senior year of college it dawned on me I'd better get on with understanding what a career was about and I really turned to. So I entered the Medical School [University of Oregon Medical School] in 1949, in the fall, in a class of seventy-two. Of interest, there were two women and seventy men in that class. And I would say that at least 60 or 70 percent of us smoked cigarettes, too, at that time.

ASH: Were there any minorities?

BRISTOW: Not in my class, depending on the definition. There were Asian-Americans, no African-Americans. There was one African-American in the class ahead of us. So far as I can recall, he was the only one during the four years that I was in medical school.

ASH: And you graduated in?

BRISTOW: Fifty-three.

ASH: Fifty-three. What made you decide on medicine?

BRISTOW: I liked science very much, I liked biology very much, and I liked the idea of applied science. So I'm not quite sure, in retrospect, about what it was. As I said, it was not some childhood dream that I was living out. There had never been a physician in the family, and nobody had ever finished college in the family, so there was no history that I was trying to follow, and I certainly wasn't pushed in any particular direction. In fact, I'd always been rather afraid of doctors. So maybe it was to join them so I wouldn't have to fear them anymore. I'm not quite sure why, but I think mainly because I liked science so much, I liked biology very much, and the idea of applied science was very attractive to me. Biomedical research, even then, had a certain appeal for me before I went to medical school.

ASH: When you were in medical school was there also a mix of veterans and younger students?

BRISTOW: Yes, but the mix was very heavily veterans. They had come back from the war, gone to college or finished college, and then came along to medical school about the same time I did. So there was a handful of us, including Vic Menashe and Bob Bigley.

ASH: That's rather surprising, large numbers.

BRISTOW: The veterans were really pretty serious about getting through and getting on with their lives, and that had to influence how we looked at things, too, I think.

ASH: What was the curriculum like when you were in medical school?

BRISTOW: The curriculum was very different from now. It was very heavily lecture oriented and laboratory oriented. Anatomy, biochemistry, et cetera, in the early years were very heavy lecture courses. Examinations were very much oriented toward what had been presented in class, and the laboratories were detailed exercises in things like biochemistry and so on. Anatomy had the traditional cadaver with four students per cadaver. It was quite different, I think, from the current curriculum. It was almost entirely lock step. I don't recall any electives, at

least looking backward. And the clerkships were very much supervised. You had almost no responsibility in the care of patients. It was, again, almost a classroom-like experience. Whereas now the junior and senior students become part of a ward team or a clinic team and participate directly in the care of patients, we did not do that. We worked up patients, we discussed them, but we didn't have any role to play in their actual care. That gradually came along as the years went by.

ASH: Were there any professors who had more influence than others on you?

BRISTOW: Yes, I'm sure there were, (laughter) some good, some bad. I think hardly anyone who went through school when I did would fail to mention Howard Lewis. He was very much a strong figure, because of his own achievements in medicine and his commitment to it. So far as I know, medicine was really his life, and so he influenced us a lot in terms of a serious attitude toward study and toward striving for excellence. I had the opportunity to speak at his memorial service, so I gave a lot of thought to what he had meant to students, and I think it was a sense of commitment to do the absolute best in every circumstance. Certainly Howard Lewis did. On the surgical side, Clare Peterson had a substantial influence for the same reason, and I think I learned as much from Clare as any other professor I had. I've never been one much to have heroes, so those would have been the major influences, I think.

ASH: When you were in medical school, you were married then.

BRISTOW: Yes, after the first year.

ASH: Was there time when you were in medical school for anything besides medicine?

BRISTOW: I think there was, and I didn't take enough advantage of it. I certainly would change the way that I did things, if I could go back and do it again. It really was a very full-time occupation in terms of study. If I wasn't in school, I was home studying; if I didn't have Saturday classes, I studied virtually all day; and I might take a little time off on Sunday, but

we took off very little time. Kay and I went to an occasional movie or had an occasional get-together with friends, and I think I put in more hours even than I should have. We began to have children during the last year, so I don't think our children were shortchanged at that time, but they might have been had we had kids when I was still in medical school.

ASH: Then what happened?

Internship

BRISTOW: I became an intern at the University of Oregon Medical School, which was an interesting arrangement. The clinical experience at UOMS was a hospital experience, all provided in Multnomah County Hospital, which later became known as University Hospital North. There were eighteen rotating interns, and the medical care provided in the hospital by the staff, I guess, was on a contract with Multnomah County, and the patients were the medically indigent people who could not afford care elsewhere. It antedated the establishment of Medicare, for example, or certainly Medicaid. So these were people who came to the county hospital as a place of last resort, care provided by the medical school, and a huge level of responsibility given to interns and residents with supervision by staff, but nowhere in comparison with today's level of supervision, which is, properly, in my view, intense.

Residency

BRISTOW: So rotating internship at UOMS, and then I was ready for residency. Internal medicine appealed to me very much because it seemed the best way to have a scientific application to medical care, at least at the time, so I wanted to take a medical residency and applied at UOMS for one. Ironically, I was turned down by the guy I succeeded, finally, as chairman of the department (laughter), and there was a certain poetic justice in that. But part of it was that the doctor draft had begun again. The Korean conflict was just about over, but the doctor draft continued, and so there was very much a bias in favor of those who had

already been in the military to get residencies at the department of medicine, so that they would not be drafted away. I had not been in the military yet. That may have been one reason. Maybe I just didn't qualify. At any rate, it was suggested I go to the VA [Veterans Administration] Hospital, which I did for the first year. The VA at that time had a full representation of all the medical facilities and specialties, but there was very little integration with the university or what, then, was the medical school. So I did my first year in internal medicine in that program, and then was drafted into the Navy.

Navy Years

ASH: I saw that on your CV. You practiced medicine in the Navy?

BRISTOW: Yes. Strange medicine in the Navy. I had had a rotating internship and a year of internal medicine. For six months I worked in a dispensary at a naval air base in San Diego, but then was moved to Albuquerque, where I did obstetrics and gynecology for eighteen months, having witnessed about six deliveries in my entire life. That clearly is the most stressful period of my whole life, because within two weeks I was a working obstetrician and sort of an assistant gynecologist. I had backup help, but some emergencies don't allow real backup help to be summoned. So that was a very trying eighteen months, during which I delivered about 350 babies. I learned a lot very rapidly, I must say, and it was an interesting time. It came along at a good time for us. We were about out of money from medical school and the first couple of years of training afterwards, and I made a reasonable living in the Navy, and we kind of caught our breath.

Medical School Hospital

ASH: I also noted that the Medical School Hospital was opened when you were a resident.

BRISTOW: Yes.

ASH: What difference did that make to residents?

BRISTOW: It made an enormous difference. You may know Michael Baird, who recently retired at our institution. His father was David W. E. Baird, who really was a visionary, I think. Some of the leaders in the past at our institution were not visionaries, but some were, and he clearly was one. He and people like Howard Lewis knew that the institution had to have a university hospital. It became clear from looking around the country, in their view at least, that we had to have a real hospital, and the county hospital wasn't going to do. I don't know what the funding was like then, but they obtained funding, and they started out to build the university hospital while I was away from Portland in the Navy. My mother used to send me clippings about a real Town-Gown brouhaha that then developed. Many of the practitioners downtown felt this was wrong, that the medical school should not be in the hospital business, and for a variety of motives, I'm sure. But Dr. Baird and his colleagues prevailed, and in '66, I believe, what we call the University Hospital South, in its first form, did open. This meant that a wider variety of patients could be attained, a wider variety of ages, for example, and physicians around the state could send patients to the hospital. It is almost impossible to picture now the fact that hospital costs were pretty much borne by the hospital. There was hardly an attempt made to collect fees from patients. We had a hospital budget from the state, and life was totally different than it is now.

ASH: So this wasn't done to get paying patients?

BRISTOW: By no means, no. It was done to obtain patients who would have educational value for training and research and to serve as a referral center. [Tape stopped.] The people who came to the county hospital, as I mentioned before, were economically deprived; they were the poor people.

Full-time Faculty

BRISTOW: Another important influence in the 1960s by the time the University Hospital really was well established, was that the National Institutes of Health were about to hit their stride, so money became available for lots of biomedical research. A huge shift occurred at the UOMS from the way the place had been run and the way that the teaching had been done in the direction of the full-time faculty. When I went to school and was a resident, most of the major services, or many of them, I should say, were directed by part-time people: very devoted private practitioners who spent a fair bit of time on the Hill running endocrinology or cardiology or any of the other services. Medicine had a full-time head from 1947 on, surgery from about the same time, I guess, but once you got to the next echelon of subspecialties and divisions, they were run, by and large, by people who were not on the Hill most of the time. The University Hospital provided a reason for a full-time faculty and the NIH [National Institutes of Health] provided wherewithal to begin to expand the faculty, and people like Lewis and others saw that this was the way to go. So in the sixties, then, we saw a large influx of well-trained, academically oriented, division and department heads. Those changes could not have happened without the University Hospital.

ASH: Then we went ahead to your Navy years a bit, and we got through OB-GYN [obstetrics-gynecology], and then what?

Work in Cardiology

BRISTOW: Then I came back. I had another year of internal medicine at the VA and then a year of cardiology at the VA and then was accepted into a cardiology fellowship at the medical school. By that time the full-time-division-head system was well established, and Herbert Griswold was the chief of cardiology, and I was a fellow for Herb for a year. That would have been 1959 to '60. In 1960, Howard Lewis and Herb Griswold decided that I'd been too much of a home-grown boy, and in 1961 I was dispatched to the University of California in San Francisco to the Cardiovascular Research Institute. It turned out that they were quite

right, and that year at UCSF was a real eye-opener. I worked in a unit run by the late Julius Comroe and learned a lot about research and education. I then came back in '62, and joined the faculty then as a permanent member, and was here from '62 to '77, when I departed again for San Francisco for a while.

ASH: Let's back up a little bit, and I'd like to ask how you decided on cardiology, and, also, you developed an interest in research at some point in there.

BRISTOW: Yes. I think the interest in research was sort of bubbling underneath the surface all along. Cardiology, all the way through medical school appealed to me because of cardiovascular physiology. Of the things I took in the first year of medical school, CV physiology stands out as something I really remember, compared with so many other things, for example, anatomy. So all along I liked the idea of cardiovascular physiology, and from a clinical point of view, at that time the early 1960s, it was a wonderful, direct application of physiology to the practice of everyday medicine. So I became interested in cardiac catheterization while I was still a resident, and my first real job, then, when I returned from San Francisco, was to direct the cardiac catheterization laboratory, which was in the new University Hospital.

ASH: Were you doing research at that time also?

BRISTOW: Yes. As a resident I had supervisors or mentors who were very much interested in inquiry, even if only by case reports, and so I began to write a few papers, as a resident. As a fellow, particularly after UCSF, I was interested in more formal kinds of cardiac research.

Faculty Member

ASH: So at that point you became a faculty member here and you were teaching as well?

BRISTOW: Yes.

ASH: Medical students and residents?

BRISTOW: Yes, and cardiology fellows. I suppose, if I were identified with any particular segment of our educational responsibilities, it would be with cardiovascular fellows from 1960s onward till I retired a few years ago. That doesn't mean I wasn't involved with residents and students, but, except for the time I was chairman of medicine, my major efforts educationally were with fellows.

OHSU

ASH: And you were teaching, you were doing research, meaning that you were also publishing at this time. Tell me more about your early years at OHSU [Oregon Health Sciences University]. What was the institution like?

BRISTOW: Well, as I've said, it was certainly growing. People were coming to fill out the various divisions in the department of medicine. I can't speak with very much authority about what was happening in other departments, such as surgery and so on, and the basic sciences, but everything was growing. Certainly, the sixties was a time of growth. And the remarkably important thing in cardiovascular affairs was the decision, probably sparked by Herb Griswold, to apply for a program project grant from the National Institutes of Health. The three pillars, so far as I remember, of that program were Herb Griswold, Charles Dotter, and Albert Starr. Charlie Dotter was pretty well known already; Herb and Al Starr were about to make marks but were not big on the national scene yet. But they applied in the most audacious way for \$5.6 million over a span of seven years—I believe that's correct, \$800,000 a year, for seven years—and were awarded the money. Well, this produced enormous freedom for programs to develop and research to be done, and Griswold's idea was that virtually everything that was done in the way of patient care or training or anything else should be performed at research-level quality, and now he had the money to carry that off. So when I returned from San Francisco, instead of saying, "Now, Dave, this is what you're going to do, one, two,

three, four, five”, he said to me—or asked me, “What would you like to do?” because there was enough money to cover all the work and yet pick and choose where one would devote one’s energies. So I chose to run the cardiac cath [catheterization] lab, again because it was everyday living physiology in human beings, and I am, and was, a clinician; at the same time, I liked physiology a whole lot. So what it was in cardiology may or may not have been quite typical of the rest of the institution, because money was not a problem. We had a research clinic, we had research nurses, we had research secretaries, and in 1964 we had a world-class new catheterization laboratory that Griswold had put together. So it was a heady time, particularly looking backward now when one scrimps and saves for anything that’s new.

ASH: And I suspect the rest of the institution was scrimping and saving, too.

BRISTOW: But, again, the sixties were a very good time for growth because of the NIH commitment to medical research and medical education. As I mentioned, patients came and went. So far as I know, there were no hospital charges assessed, but that was going to change, of course. But that, I suppose, really didn’t get going until the seventies, at least, before we began to recover charges. When I was chairman, which was ’71 to ’75 or so, we started our first private-practice group in the department of medicine, and I don’t know if it’s true, but I used to joke that our legal fees were in excess of our gross income that year. We finally closed it down because we weren’t making any money at all.

ASH: Is that because the bills weren’t getting out?

BRISTOW: I think that’s true. There was no real system for billing or collecting. It was a totally different way of thinking of cost accounting and keeping track, and we’d all been brought up on a “free” mentality. Everything was covered by the state still, or grants now that we had the program project grant, and the pressure wasn’t quite there yet for charging for care. Very soon thereafter, the pressure was very clearly there, partly because the costs of medical care began to really skyrocket as the technological era hit home. And there was no way that the state legislature

was going to, and no way they could begin to, cover the costs of hospitalization. And the other important thing that came with that transition, whenever it was, is that it exposed the university, then, to real life. We could no longer kind of hide behind this screen of everything being paid for by somebody else. And that was not bad to change, by any means.

ASH: If we could go back a little bit to your first days as a faculty member, I assume you came as an assistant professor, and, then, at what point, and through what process, did you become an associate professor.

BRISTOW: Well, certainly by a less formal process than exists now. The university committee structure and governance is a phenomenon of the seventies. There was no such thing, really, in the sixties when I began. First of all, I think I was faculty member number forty or fifty or sixty or something for the entire institution, so there was not a huge full-time faculty. By the time you named all the different department and division heads, you'd accounted for a fair proportion of the faculty. So the institution was very much run by department heads, and to a certain extent division heads. So, so far as I know, I was promoted because the chairperson of the department, with the recommendation of my immediate boss, thought I ought to be promoted, and the dean concurred, and I was promoted.

ASH: Did tenure go along with that at the time?

BRISTOW: I don't honestly recall. What I can tell you is, by the time I became a full professor I probably didn't know what tenure was. I was very busy doing what I was doing. I worked hard and had a family at home, and I paid a lot less attention to such things than one might now. So I was promoted to associate in '66 and professor of medicine in '70. Around about '69, Howard Lewis realized that he now had a very large department with a large training program. When I was younger he had six residents, had no interns, because they were all rotating interns, and had a couple of services to run in the county hospital. That made a wonderful situation for being a preceptor and a mentor, and there was not an overwhelming administrative load to worry about. He could worry a whole

lot about what his trainees were learning and how the patients were being taken care of.

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

ASH: Then?

BRISTOW: So around 1969, several things happened. First of all, the program at the VA in medicine became integrated with the university. This was a rightful thing to do. The school had been sending medical students to the VA because they could not accommodate them all for clinical training at the school, from the beginning of time. And, yet, the VA had been a separate, more or less equal program. So Howard Lewis, under the pressure of several faculty members, then agreed to integrate the two programs. In fact, one of my early jobs as a faculty person was to draw up a rotation schedule for all the medicine residents and interns between the two hospitals. I jokingly said that the work was funded by a grant from the Gallo Foundation, because that's what it took. At any rate, that was a huge change and meant the department now was quite large.

So we had a medical service at the VA to be concerned about. We still had the county hospital to be concerned about at that time, and, of course, the university hospital. So Howard Lewis appointed two chiefs of medicine on the university side: Donald Kassebaum, who later became university vice president, was the chief in the north hospital, and I became the chief in the south hospital as Lewis' lieutenant. That was an almost essential thing to do because there was simply too much for one person to handle. So we could do some of the teaching, some of the supervising, some of the patient care, and, yet, I still had time to do my own thing. So from '69 to '71 I was occupied with that.

In '71, Lewis decided he wanted to retire. I think he was sixty-nine, and I took that job, as the chair in medicine.

Becoming a University

ASH: That was an interesting time to take that job. With the university coalescing in 1974, you were in a position of great responsibility.

BRISTOW: Well, I thought I was, anyway. One of the important changes that happened was really mirrored by what I said about Howard Lewis. When he started the job of running a department with largely academic, medical, and research concerns, he was the spiritual leader of the gang, and administrative things were a nastiness you could deal with, but with as little time as possible. In the early seventies it became evident that you couldn't escape that sort of thing anymore. Meeting the payroll became an increasingly important issue, paying for medical care, and so on, so I learned that it was very much a time consuming job, heavily weighted toward administration, and I learned that I was not a world-class administrator. So I only lasted about four and a half years, and I really was kind of burned out. I think I did a good job, and we did quite a few things I wanted to do, but I could see that this was not going to be a career for me for the rest of my life.

Maybe to talk a bit about the structure of the school just before '74□ The kingpin on the hill was the Dean of the Medical School, and so far as I know the dean reported directly, more or less, to the legislature, but via the State Board of Higher Education. Strangely— and it used to really bug us to a certain extent— at commencement time the President of the University of Oregon would come up from Eugene and award the diplomas for doctor of medicine.

ASH: That was the only time you saw that person?

BRISTOW: Yes, and that was about the only contact that Eugene had with us, and it was an administrative artifact. I don't recall when that was changed, but we were made autonomous, and really, as I said, the important figure was the dean of the medical school. So far as I know, the budget for the school of nursing went through the Dean of the School of Medicine's office. I can't speak for the School of Dentistry. Somewhere in

there they'd moved to the Hill from northeast Portland with their new building. But there was no question that the major responsible person on the Hill was the Dean of the Medical School.

ASH: And who was that at the time?

BRISTOW: That was Charles Holman, who followed David Baird, I think, directly.

I don't know where the idea arose that we really were a *de facto* university. We had different schools, and the different schools needed to be represented more adequately. I think the School of Nursing was held back in its development, not by any intention, but just by the administrative structure of not having a way to speak for itself or present a budget for itself via a university president. And I think the same might be said for graduate studies. So things were expanding, and it was pretty clear that these various units needed some sort of voice and that there ought to be some integrated way of presenting OHSU's needs and accomplishments. And, as I said before, I don't know where the idea arose, but it seems to me it was an idea whose time was probably overdue.

ASH: Were you involved, then, in making any of this happen?

BRISTOW: No, not in any way. I was very busy doing what I did, and, *no*, it was completely around me. I came to know William Bluemle a bit, for whom I had great respect, but I was uninvolved in making this happen.

ASH: You, however, were in a position, when [inaudible] came where it didn't make a lot of difference to the clinical program.

BRISTOW: I think that's true. I think it made a whale of a difference to the School of Nursing, probably made some difference to the School of Dentistry, though I really don't know, and I'm sure it made a difference to other units within the school, like graduate studies, because it was Bill Bluemle's job to be sure that everything was represented and to present an integrated budget to the state board and to the legislature. I had a certain

sympathy with Bluemle because I think he was an internist before he became an administrator, and so he had some sympathies with us. About the time he became established, I left the chair, went on sabbatical, but I did come to know him a bit with some searches and other things, oh, around 1975, '76.

Sabbatical

ASH: Then, when you went on sabbatical

BRISTOW: Seventy-five.

ASH: Is that when you went back to San Francisco?

BRISTOW: No. During the time that I was in the chair I became interested in the dynamics of medical care, how doctors made diagnoses, how health care institutions took care of people, and so on, and so I met with Mitch Greenlick and Arnie Hurtado in the Kaiser system. I should mention that Arnie Hurtado was the chief of medicine at their major hospital then, and I was chief of medicine at OHSU. I called him up one snowy day and asked him if I could come see him. It turns out, so far as I know, no one had ever called to even say hello to the folks at Kaiser. Kaiser at the time, even then, was taking care of a large proportion of Portland citizens, so it just seemed to me I ought to know who these people were and they ought to know who I was, and maybe we could even do something together sometime. Then I got to meet Mitch Greenlick, and they were doing things that I found very exciting, for the reasons I said before: how health care is delivered, what seems to matter, what doesn't.

So I became interested in health-care delivery and spent a sabbatical year, after I left the chair, studying what's called the process-outcome relationship in medical care, how much does what a doctor does have to do with what happens to the person. We all knew very well what ought to be done for Condition A: you do these tests X, Y, Z. But if you do those tests: X, Y, Z, do they have anything to do with what happens to Condition A, or is it just something that seems pretty logical? In this era of outcome-based

health care that seems prehistoric. We really didn't have much of a clue about whether what we thought was logical in health care had anything to do with the outcomes in health care for many conditions. The era of the clinical trial hadn't quite arrived, and many of the things you read about in the paper and hear about over the television these days, that are commonplace, were virtually unknown then. So I found that all very exciting and spent a year learning about that kind of research. I then faced reality when I found out I couldn't get any money to do more research, couldn't get any money to fund myself, e.g. personal funding for salary, and faced a career decision, which was, was I going to persist in this new direction and give up cardiovascular disease or seek the safe haven and go back to cardiology, and I chose the latter, mainly because I really was a cardiologist. And one of the things I had missed as chairman was not being able to participate in cardiovascular medicine, where a lot was happening. So the sabbatical was a one-year hiatus devoted to something that broadened my background, but something I didn't ultimately pursue.

ASH: Then, at the end of that sabbatical year?

UCSF

BRISTOW: I moved to the University of California San Francisco. I was about to be awarded to cardiology at OHSU, and it struck me that I might, or might not, like that. It would depend on whether I thought I was any good or not. So I thought I'd take a flier out on the open market and see if I could get a job. Our last child was leaving for college, so we were footloose and fancy-free, more or less. And, then, I got an offer from San Francisco, where I had been years before, and I then joined the faculty at UCSF, worked in the Cardiovascular Research Institute, was Chief at the San Francisco VA Medical Center, and became very busy for another four and a half years.

ASH: So this was your second time in San Francisco, and was it partly a love of San Francisco, or any feelings about OHSU that drew you down there?

BRISTOW: I did not leave OHSU with any bad feelings about anything. People asked me what caused me to leave, and nothing at OHSU caused me to leave. I had this genuine feeling that I ought to get myself a job and not slide back to a job. It was a matter of self-esteem. Could I qualify at my age to get a job on the open market at a good place, and UCSF was a pretty good place, and the answer was yes, I could. That did big things for me. It had nothing to do, really, with OHSU, it had to do with other reasons. As far as UCSF, it had become evident very early on to my wife and me that there were very few places we would live. I was fortunate to have a lot of job opportunities over the years when I was working at OHSU, and I looked at a few of them and would always come home and kind of shake my head because, for whatever personal reason, this was home, and the attraction elsewhere was just not worth moving from this institution and this community. So I went to San Francisco and then kind of got homesick, I think. We haven't talked about outside activities, but one of my hobbies was mountaineering, and there's not a heck of a lot in the San Francisco Bay area, and in Portland you can get to Mount Hood in about an hour and a half. So a whole lot of reasons all added up to think about coming back. The job opened, and I applied for it, and I got a job here again in 1971 to run the cardiology training program, and that's what I did till I finally was pushed out the door.

ASH: Then, when you came back from San Francisco, it was partly the draw to Portland

BRISTOW: Oh yes, and the institution.

Return to OHSU

ASH: What did you notice in particular, having been away, about the institution that was different? What had changed while you were away?

BRISTOW: A lot of things had their culmination while I was away that had begun in years before. If you look around the country at medical schools, we artificially have classified them in three, not levels, but three types.

One is very much a local medical school. There are some small medical schools that sprung up during this time that we're talking about around the country, partly I think on the basis of local political pressures in states that really didn't need another medical school, but they, for whatever reason, were going to have one down in the southern part of the state or the eastern part of the state or what have you. And they're perfectly good schools. They don't have much of an influence on what happens in the country, certainly in terms of research or education. They serve their function locally.

Then there are some regional medical schools, and, clearly, until the 1980s, Oregon was a regional medical school. It had world class people, but a limited number in various departments. So if Oregon, in the fifties and sixties and maybe the seventies were to go up against UCSF in this, that, and the other thing, it wouldn't win. When I came back in '81 the transition to becoming a national-class medical school was beginning, and I think it had to be, partly at least, a direct result of becoming OHSU instead of UOMS and this fragmented kind of structure we had before. But there began a serious commitment to really national, world-class medical care and research, and I think we see that now with the current status of the institution. Obviously, I'm a bit biased, but its reputation has grown by leaps and bounds in the last fifteen years. So one major change was just the status of the institution and a growing commitment to be, no matter how good we might have thought we were, better than we had been. And I think that that's clearly an evolution that has continued. I'm absolutely certain Peter Kohler would confirm that. But that sort of fervor throughout the institution has gradually come.

The funding of medical care, of course, was the other major, major change from when I had left, and by the 1980s the department was going to have to earn most of its own way. I don't know what proportion of soft money— patient care grants, contracts— is to any hard money from the state in the department of medicine, but it's predominantly earned money every year, as you know. That was certainly well underway. And how people were being paid had shifted from dependence on state salaries to

earned money, earned in a sense of billing collection, grants, contracts. So those were the major changes.

Perhaps one other, and that is that the great growth rate of the sixties, and, to a certain extent, the seventies was slowing down, and competition for grants and other things like contracts was increasing mightily. I had a fair bit to do with the National Institutes of Health over the years, and on some of the bodies I sat on, the award rate for approved grants used to be 50 percent, sometimes maybe a little better than that. I don't have any idea exactly what it is now, but I know in some study sections it's on the order of 15 percent. So that means for the individual applicant life is three times tougher than it used to be, in a way. That was beginning in the eighties, and, of course, it's reached its peak now.

ASH: What, then, exactly were you doing when you came back? You were a full professor. Were you able to do research?

BRISTOW: Yes.

ASH: As much as you wanted?

BRISTOW: One year, just for the fun of it, I kept track of my time in fifteen minute segments all day for a whole year. That sounds like it would be a lot of bother. It was really very simple. At the end of the day you could think back. It turns out, at the end of the year I'd spent fully one-third of my time in research; a third in patient care-related activities, going to clinic, attending, et cetera, working in the CCU or the ICU; and a third in teaching, which in my case had a lot to do with the cardiology fellowship program. So it was a very balanced, privileged kind of life. I got to do pretty much what I like to do.

ASH: Were you also having to go after grants?

BRISTOW: Yes. I had a lab with a good friend, George Pantely, and nobody was going to fund that for us unless we went out to compete. We didn't bring in a lot of money, but we brought in enough to keep going on a

shoestring until I retired. At the end of '92, early '93, we closed the lab down.

ASH: You closed the lab down and didn't continue?

BRISTOW: Not in the same fully-funded way, no. And I wasn't there anymore, too, to do my share.

So as I say, I got to do some of the things that a lot of people would like to do now. I think it would be very hard now to take the job I had and spend a third of my time teaching, a third patient care, and a third research, unless I could for sure bring in all the bucks to pay for each of those segments.

ASH: What do you think it would look like now?

BRISTOW: Oh, given what my resources were, it would be 10 percent research, it would be maybe 20 percent teaching, and the rest would be patient care. Somebody's got to pay the bills, and there are great pressures to do that. And I think those pressures, perhaps fairly, ought to be exerted on the older people like myself who had had their chance. After all, they say research is a young person's game, and I think to a large extent that's true, and I'd had my playing, and it would be fair to expect a reasonable contribution to patient-care income, that such be brought in by people like me. So I got out just in time.

ASH: On the other hand, you had the reputation. You had already brought in grants. It seems like they do build on one another, too.

BRISTOW: Yes, and I don't need to overemphasize the point. If I could have brought in some money, we would have certainly stayed in business. But time is a lot tighter now. And the other thing about time is that the amount of money earned per time is now regulated outside, and those dollars per hour, in some settings, are falling. So to bring in X dollars, it may take 2X hours compared with ten years ago, relatively speaking. I don't know whether that's clear or not, but certainly physicians'

earnings are going down in certain areas in relation to the amount of time they spend.

Town-Gown Relationships

ASH: I have some themes that I wanted to be sure to cover with you, because the span of time to go from indigent care to what you were just describing is such a big change. One of the themes I wanted to ask you about was Town-Gown relationships, because it seems that the competition at certain points was going to be greater than it was in the beginning.

BRISTOW: Yes. I have always felt fairly immune from those stresses because I simply wasn't going to participate in any sort of acrimonious debate. There were two sides to every issue. So from the beginning I had friends downtown, even though I was full-time on the Hill, and I still consider them as good friends as they ever were. One of the nicer aspects about being sick is that I hear from those folks, and that's really kind of rewarding. It validates for me the idea that you can fight these things out on one level, but they should never descend to any sort of personal level or personal acrimony.

I don't know much about the Town-Gown schism over the building of the University Hospital, whether that was representative of a broadly held opinion that was antischool or just a few people who were able to make noise in the press. It seemed to quiet down. I think there were a lot of hurt feelings as full-time faculty were recruited to take over various jobs at the university that traditionally had been held by private practitioners, and understandably so. They had devoted decades of Tuesday and Friday afternoons, let's say, to working on the Hill and being sure that programs succeeded, and, in a sense, then, they were cashiered out, gracefully, but their role was clearly diminished as full-time people came to the Hill. It had to be. The demands on the Hill were simply not going to be met by part-time people, at least in full. But I think some people felt disenfranchised after having contributed a whole lot to keeping the school going through some difficult times, not the least of which was World War II and other stressful times. On the other hand, as I've looked around the country, I

think our local fights are pretty much peanuts compared with a lot of places in the United States, and I've been gratified to see quite a number of my downtown colleagues as patients, or their families as patients, which meant to me that there must be a level of trust that transcends all the nonsense that people have to participate in, but shouldn't dominate the relationships.

Women and Minorities

ASH: One of my other themes we touched on a little bit, women and minorities, both in the medical school and in the fellowship programs. Could you comment on that?

BRISTOW: By all means. One of the nicest things that I think internal medicine has shown is that women can be recruited and integrated and at least become equal partners in their business. There are some very important posts, as you know, held at OHSU by women. My physician is a woman. And so that's been a very welcome change in internal medicine. As you also know, some fields have been very, very slow to integrate women, and I don't pretend to know what the reasons are. I just point with pride to internal medicine, which has, I think, succeeded in this area very, very well. I think women have brought a certain level of class, that has risen above the good old boy kind of approach, to any organization, and I think that's been very welcome.

Also, I don't know what our exact numbers are, but we certainly do pretty well in recruiting women to medical school. My understanding is that we accept about the proportion in the class of women that is the proportion of applicants. It's something like that. I don't think it's quite 50 percent, but it's pretty close.

ASH: You mentioned that there were two women in your class.

BRISTOW: Two in our class out of seventy-two.

ASH: Looking back over the years, was there a certain time when there was a particular jump, or was it a gradual buildup?

BRISTOW: I don't honestly remember, to tell you the truth. I think of it as a gradual evolution, and I had felt for those two women in our class over the years that they were unmercifully teased at times. And, of course, they were the people who had fought the hardest to get where they got. They had overcome God knows what to get into medical school at a time that it was almost entirely a man's game, but they did persevere, and they both practiced in this area in Portland. But the evolution and the timing of it I honestly don't recall. I just know that as the years went by there were more and more and more, and certainly in internal medicine they became a very important force. If you look in certain surgical subspecialties, there are very few still.

ASH: What about cardiology?

BRISTOW: Cardiology has been rather slow, I'd say, although I [inaudible] on our faculty at the VA we have one female, and at the university we have two, and I suppose that adds up to around 25 percent, 20 percent, something like that. But looking around the country, it's still been pretty slow in cardiology. And another observation is a bit troublesome, and that is that in the research field of internal medicine, the numbers of women seem to be still lagging behind. If you look at the people elected to various prestigious research groups, there aren't as many women as one might have expected from the number of women in internal medicine. It's coming, and it takes a while because those things happen at age forty-five or so, but it's been a bit slow.

ASH: And, what about other minorities? You mentioned that there were Asian-Americans in your medical school class, right?

BRISTOW: Yes.

ASH: And as you saw the population going through medical school after that, there were few Blacks until a little further □

BRISTOW: But not many still, it seems to me. We tried very hard in the cardiology training program to recruit minorities, and for a while,

women, before there were enough women to really begin to recruit, and it was very difficult to find people who would apply. Our program would take two or three people a year, and we might have two hundred express interest, and we might interview thirty people. We were lucky in a given year to find one African-American to interview. So we came in after college medical school internship residency, now we want to find this particular product who's had all this training, and it was very difficult, indeed, to identify a pool of candidates before we ever tried to recruit them. We were under pressure from the National Institutes of Health to do so, as there was a national program to try and get minority trainees into these NIH funded programs, such as what we had, an institutional training ground, but it was very difficult to find them. In the cardiology program currently there is one African-American trainee, and he's the first for a long time.

Space

ASH: We can't talk about OHSU without talking about space. What is your perception of the way space and the buildings have changed over the years?

BRISTOW: Well, had I had to drive through today's university in 1950, I would have found it unbelievable. My mother, who is ninety-two...

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

ASH: We're probably ready to roll again.

BRISTOW: Okay. So there's the sort of macropicture of space, which is amazing, and I think the ultimate is the new Doernbecher Hospital, which, in a sense, doesn't take up much space at all. It's all up in the sky. I think it's a fantastic design. As far as individual people and their space, it's hard for me to comment. We were fortunate, George Pantely and I, in having a research laboratory in 1981.

ASH: Where was that?

BRISTOW: That was in the Research Building on the ninth floor, and we had, I guess, four hundred square feet or so, maybe a little bit more, and that was adequate for our needs. That was part of a unit called the Heart Research Laboratory, which was a very important chapter we haven't talked about. So I was very lucky, and it was adequate space for what we did. I think it might be much more difficult to start out now and bid for space. It sort of a Catch-22. You really can't deserve to have space unless you have some money to run it, and you can't get any money unless you've done something to justify the award of a grant. So I think for young people it must be quite difficult. You have to achieve before you get money, but you can't get money until you achieve. I contrast that with Herb Griswold asking what I wanted to do and then bringing home the bacon with a program project grant of hundreds of thousands of dollars a year. I had it pretty easy by comparison.

As far as the mechanism for judging space, I don't know very much about it. I've been out of things now, for practical purposes, five years, and so I really can't comment with any sort of sense about how the school ought to deal with its space problem. Certainly, the new buildings will decompress things for some people, but beyond that I can't say much, I don't think.

Research

ASH: Then, you just mentioned something that we hadn't talked about which seemed significant, which was the research lab. Can you tell me more about that?

BRISTOW: Yes. It was part of this midlife crisis, I suppose, that said, "Are you going to be a real doctor again or are you going to be something else?" And I decided to go back and be a cardiologist. I thought, well, wouldn't it be fun to try and see if I could run a competitive laboratory again, having now reached vintage age. And so, with George Pantely, we began to do some studies on the regulation of the coronary—the heart's blood supply—and then, ultimately, the metabolic regulation of

heart function and the heart's blood supply. Some of the time we did function on a shoelace, but we did work from '81 till '93, roughly, when we stopped systematic work in the lab. In those eleven years, I guess, we think we made some contributions to knowledge about cardiac metabolism and myocardial blood flow and those integrated with the mechanical function of the heart.

If I had to pick and choose some work from forty years worth, I guess I'm happiest with some of the work in the last few years, just before I quit. We were extraordinarily benefitted by some very bright young people who worked in our lab, as always, and so we learned as much from them, by far, as they ever learned from us. So they got a start in the business, and we got to do some things that turned out to be pretty meaningful to us.

ASH: Such as?

BRISTOW: Well, very quickly, when a heart artery is partly obstructed, like a gas line in a motor in a car, if you have fuel line trouble, you've got fuel line trouble, and you know it very quickly, and it won't work, and so you assume that the amount of work that the engine is willing to do is going to be limited by the amount of fuel that comes down the fuel line. We showed that that's true in a heart, but the heart is pretty smart; it doesn't want to get anywhere close to going bankrupt, like the horse that runs so fast and drops dead at the finish line, so to speak. And so it regulates itself downward, and, lo and behold, it starts to pay back some of the metabolic debts that it gets when the fuel line is partly obstructed, and says, if you'll only give me enough fuel to go thirty miles an hour, I think I'll go twenty, and set a little bit aside. It's like working for a living but barely getting by, but putting a little money aside anyhow. The heart does that. It gives itself a little bit of a buffer, a little bit of a savings account, so that it doesn't run the possibility of becoming damaged in the process. Obviously, there's a limit to this. If you cut all the blood supply off, the heart's going to die. But a lot of people have states in which the blood supply is mildly to moderately limited, and the heart seems to be smart enough to cut back on what it does a little bit beyond what is required by the decrease in the fuel coming down the fuel line. And some of our trainees, notably Andrew Arai, demonstrated that very conclusively in

some elegant studies, and I suppose I liked that work as much as anything we did. Andrew finished with us as a cardiology fellow and then has spent the last four years at the NIH, and this month, in fact, has begun as a staff member at the NIH, so we're quite proud of him. And his contributions to this line of thinking were really quite fundamental.

Fellowship Program

ASH: You also spoke earlier about your dedication to the fellowship program. It was an important part of your life at OHSU. Can you think of other very special fellows?

BRISTOW: Oh yes. From the beginning, a number of people who now populate downtown cardiology went through the training program on the Hill, and they would be represented in virtually all the hospitals in town, from people back in the sixties to people who have just gone out in recent years. I don't think I'll name individuals because I'll leave people out, but all along the line we have taken enormous pride in seeing these people join various hospital staffs, and then make important contributions very quickly, which new people do when they're very good. They sort of jostle things around a little bit, and everybody tends to do things a little better, I think. So I've taken enormous pride in that.

From early on we were interested in trying to replicate ourselves, too. I guess most academics try to do that. We have tried to pick out in the last fifteen years or so those people who seem to be qualified for, and interested in, an academic career, and it turns out that we've done pretty well. In fact, if you add the people that went through the program in the sixties, there a lot of people around the United States in academic posts who have gone through the cardiology program. The recently retired president of the American College of Cardiology was one of our fellows; the director of the cath lab at McGill was one of our fellows; a couple of assistant professors at the University of Minnesota were fellows of ours, and so on down the line. So if you only train a couple, three people a year, you don't send out dozens of folks, so we're very pleased with the number who have gone out to academic centers and taken not only their own skills

but a little of the Oregon philosophy, whatever that is, and added to their new position.

Yes, I think, as I said some time ago, if I'm identified with anything by people around here, I think it would be commitment to the cardiology training program at the college.

ASH: And when you look back, is that what you would say you were most proud of as well?

BRISTOW: Oh, I think so. I think I was better at that. I obviously spent time with medical students, a fair bit of time, but I think teaching at that level was something that I really took to comfortably, and perhaps more comfortably than any other activity, so that meant that I spent a lot of time in conferences and seminars and rounds and seeing patients with cardiology fellows. And, they were really just junior colleagues, they weren't students anymore, so that made the relationship pretty easy, and I enjoyed that as much as anything.

Medical Training

ASH: Well, thinking again about the medical students, did you see any change in the way medical students were trained from when you had a very classical medical education to the more recent years?

BRISTOW: Yes. Certainly, that's the major change, and I think that most of that change is very much welcome. By the time I finished medical school I had no practical medical experience. I had examined some patients, but I really hadn't participated in the decisions that had to be made day by day in patient care, because once we'd done our thing, we were spirited away to lectures for the rest of the day, or a conference, perhaps, with our attending. And conferences with our attendings were never in conjunction with interns or residents, we were always off by our side. Now, that was good in that it gave us a lot of attention from our professors, but it was inadequate in that it left us out of the loop when it came time to really do things with sick people. So we had a lot to learn when we graduated.

The kind of internship, as I mentioned, at the county [hospital] very quickly immersed one, however, and you caught up or drowned very quickly.

So the evolution to participating in medical care along the way by students I think is a very healthy one. The almost complete abolition of the lecture system I'm ambivalent about, I suppose partly because I came up through that system, and most of what I learned, I learned that way. If my lecture experience were taken away, I wouldn't know anything. So as I see it not being very much of the curriculum, I worry a little bit about it being shortchanged. But four or five years down the line, I suspect it doesn't make a lot of difference. What matters is time spent doing something with people who care about what you're learning, and perhaps the mechanisms aren't quite so important as debates in curriculum committee meetings would suggest. If you write everything down on a piece of paper, or on a screen, that you think students ought to be exposed to, it's an impossible task to meet. So something's got to go, and maybe if something's got to go, you don't do it piecemeal, but you take two steps back and try and make a different system where you learn as you go instead of, as the years go by, rather than cramming it into one course at a time. I must confess a lot of the stuff that we learned was stuff we learned because it was there, and it never again in my entire life came to my attention, and, yet, I'm sure that the professors argued mightily about the importance of its inclusion in the curriculum.

I suspect, to conclude that sort of theme, that maybe this idea of leaving things out and really focusing on what is important for people to understand is what's very important, and not just learning everything that somebody can think of to cram into a particular course. If I were to design the cardiovascular pathophysiology course, I suppose— if I had free rein—I'd put everything in there but the kitchen sink, and I'd have half a year, or something. Well, that's silly. You know, there's immunology, and there's hematology, et cetera, et cetera. So you have to take a different approach. So I think, in the right environment, I suspect the changes are well founded. But we'll cycle some. There will be some more lectures back, I suspect.

Family

ASH: Did any of your children go into medicine?

BRISTOW: Yes. We have three children, and our middle child Dick does do it. He received no particular push at home, but for some reason he decided to go into medicine, and he went to Harvard Medical School, where he graduated with honors, I'm proud to say, and he's an associate professor at UCSF. So he moved in as a house staff member at about the time we moved out to come back to Portland. I think he was an intern, in fact, the year that we moved back.

ASH: And what is his specialty?

BRISTOW: His specialty is pediatric cardiology, and he's a molecular biologist, and he runs a molecular biology lab at UCSF. So he's a gene jockey.

ASH: But you can see shades of his father, too.

BRISTOW: I guess so, yes. And I find what I've learned about pediatrics now, since he's in it, very enticing. It's pretty stressful, I think, at times, but it's very interesting.

Technology

ASH: One of my other themes is technology and meeting your information needs as a faculty member, because this is a personal interest [of mine], and also you were there when the whole concept of the BICC was being developed, and I wondered if you'd comment on that.

BRISTOW: I'd eagerly do that, from two standpoints, if you don't mind: first of all, technology per se, and then I'll come to information.

One of the nicest things that happened to me at OHSU was, after I left OHSU I was invited back to give a commencement address in 1977 or

something, so I chose to talk about technology and medicine, because it was beginning to assert itself as a problem. The point I tried to make I think is still valid, that the problem is not technology but the appropriate use of technology and avoidance or overuse of technology, and I think that's still a major problem. I'm sure that Medicare and health plan auditors can quickly identify overuse of technology still, and that's a great shame because what technology can do for us is something that just isn't going to go away. For example, you've just seen the controversy about diet pills and heart valve trouble and the diagnosis by echocardiography, and almost a companion piece a couple of weeks ago, about how doctors don't seem to be very good listening to hearts with their stethoscopes anymore. Reluctantly, as somebody who considers himself pretty good with a stethoscope, I think that's the natural way of things, that technology will replace some of these skills that will be seen as obsolete in the decades ahead. That's not to say that the stethoscope is going to go away. So you have these two competing influences. You have denial of technology by those who want to hold on to the past, and then you've got the overuse of technology by overzealous people, sometimes young people, for whatever motive. I do hope that gets rationalized.

I don't have a lot to say about information except that I think it's curious that medicine has been a bit slow, in my opinion, in the use of computer technology for very practical office-based information delivery. If I prescribe something like an anticoagulant and the person is taking some other drug, I'd like very much to know if there's a drug interaction, and I can't keep track of all those various drugs. I should have a little updated disk, or maybe on the Net, or somewhere I can go X, Y, Z, and I punch in Drug X, and it says, "That's okay." I'm just surprised that such things have not developed somewhat more quickly. I was really quite excited to see the BICC develop, and I'm certainly not a computer expert by any stretch of the imagination. In fact, we had to have our hard disk scrubbed last week because I somehow wrecked it up. But I just foresee the distillation of information and access to information as one of the big challenges for places like ours.

I don't know what you consider your status to be, but it has to be extremely important. I've had a lot to do with medical journals over the

years, as you might guess, and the quantity of information that's out there is just overpowering. By the time I'd get through reviewing something and it would be out in print, there would be thirty-five other papers to keep track of. So the big challenge is to organize that information and make it available in a useful form, and the only logical way to do that is with computer technology. And I certainly am not one who would hark back to the good old days when we did it with a pencil and paper. I think that's really ostrich-like. I wish I were better at it.

ASH: Well, you definitely use your computer all the time. When I was trying to call you this morning

BRISTOW: Oh yes, she [Mrs. Kay Bristow] was online, or I guess I was, actually.

ASH: Well, I couldn't phone you, but just a few minutes after I e-mailed you, you answered me back.

BRISTOW: That's right. I think it probably, in fact, it did say, "you have mail", while I was fooling around.

ASH: When did you get your first computer?

BRISTOW: I bought it for my wife for Christmas. Are you there, Kay?

K. BRISTOW: Yes.

BRISTOW: 1990?

K. BRISTOW: I don't remember.

BRISTOW: '90, '91.

K. BRISTOW: A while ago.

BRISTOW: Yes, because we wanted to do word processing. I just wanted to be able to work a computer. I just couldn't ignore it any longer, and people at work were beginning, everybody, to have their own computer. I never did. About the time everybody had one, I retired. So I got her a computer. We got a nice laser printer at the beginning, which was key, because we could do nice looking stuff and send it out to people.

ASH: And when did you get on the Internet?

BRISTOW: We just got on the Internet this year, about six months ago.

K. BRISTOW: Probably around Christmastime.

BRISTOW: Yes, last Christmas, and it's proven to be wonderful for us, because our kids are in Tacoma, Seattle, and San Francisco. So everyday we get something from somebody on the Net or by e-mail, and since I got sick, which is now about ten months ago, there have been times when it was fairly complicated, and I had three doctors, and I was bound and determined that they would all stay in touch with each other, because that's always a danger in medical care. People go off different ways without talking with each other. These three maybe wouldn't do that. But at any rate, we keep in touch by e-mail. So if I have something come up that's not an emergency, I just send an e-mail to the doctors, and they all know about it, and they all respond, or talk to each other and somebody responds. It's been very convenient, because I don't have to interrupt them. I don't have to track them down. They don't have one more beeper call. So it's been really very convenient, don't you think?

K. BRISTOW: Um-hmm.

ASH: And they all have e-mail available there at OHSU.

BRISTOW: Yes, they all have it, so it's easy.

K. BRISTOW: Well, and we have our friend in England.

BRISTOW: Yes.

K. BRISTOW: On the computer you can read his writing.

BRISTOW: Yes. Press the button, and he has a message from us in Oxford. It's fantastic.

ASH: Plus, are your three children in academics?

BRISTOW: Two of the three. The other one works at the University of Washington Book Store, so in one way or another they're all in the business, and they all have computers.

ASH: It's a great way to keep in touch. We were just talking about the evolution of the BICC at OHSU

BRISTOW: Which is her bailiwick.

Information Needs

ASH: Yes. And one of my interests is the influence of information technology on the way we do work. But another interest is information needs, and we got into that a little bit with your saying you wish there was something available to distill the information because there's so much out there.

BRISTOW: Medical diagnosis by computer has been something that obliquely, at least, has interested me for a long time. When I was on the internal medicine board we decided to construct an examination that would mimic a patient on a computer, and so a contract was let to develop that, and after approx—well, a lot of money, anyway—John Benson could tell you just how much—the project was abandoned because the number of variables was so great, it just simply couldn't handle them all. And not only that, you couldn't handle them all to account for the fact that you might solve a problem with this pathway—she does it that pathway and I do it that pathway—and they all get to the same place. So you have to have all

these different pathways for solving problems, and in each pathway a zillion variables, and it began to be an outlandish amount of information to handle for a candidate to take as an examination. That's before you faced up to the fact that you might have five thousand of these candidates who had to have a computer and access to memory to take this exam. So one of the things that may have held things back a bit is just the vast number of variables that have to be taken into account. But that's different than the medical literature.

ASH: When you were doing a lot of writing, and you have done a huge amount of writing—your CV is way thick—how did you get your information?

BRISTOW: My information came largely from the medical journals and not from computers per se. I wrote, by and large, in fields that were not worldwide in their expanse of literature, so you didn't have to know ten thousand titles in order to do what you needed to do. So I would start out with the common journals that I was accustomed to, just look in the index, get a few lead references and go from there, and then I would do an *Index Medica* search or something else to be sure there wasn't something I had missed. I don't think that would wash anymore. I think you really have to have a much more comprehensive search. It really nettles reviewers of manuscripts to not see some important reference cited, particularly if it happens to be one of theirs (laughter). That really puts you off.

ASH: Same thing with grant proposals.

BRISTOW: Absolutely. It's exactly the same thing. So the way I got by really wouldn't do it anymore. I think the last five years have changed that pretty radically. Also, I was able to depend on the younger people, when I was in the lab, who would go out and do a lot of the legwork. And as far as my own writing, it was from knowledge of the field, finding the key references, and then going from there on—often, I'm sad to say, on file cards, although now—or, by the time I quit, I had some computer reference lists that I kept up myself, so I didn't have to go search for them the twentieth time. I could dial them up on the computer. I guess that's where I

learned to use computers in the oh, the late eighties, early nineties at OHSU. I used the lab computer to store references.

ASH: And did you use the reference librarians in the library to run searches?

BRISTOW: I did not, mainly because I guess I didn't need to. The field was, again, constricted enough that I could get stuff out of it, and I had colleagues with whom I was working who could do some of it. How often they used such people, I don't know. But that doesn't mean I wouldn't do it now. I think I'd have to have a totally different kind of scientific lifestyle now, just judging from what we do upstairs on the computer. It's a different world.

ASH: I'm going to take a look at my list of things here and make sure that I've covered everything.

International Sabbaticals

BRISTOW: One thing we didn't mention is another thing about sabbaticals—that OHSU has been, at least for me, very generous. We spent two separate years in England, twenty years apart, and they were fantastic years, certainly from the standpoint of research, but also from a variety of other perspectives, not the least of which was cultural and academic process. I don't know how generous most institutions are about sabbaticals, but we were very privileged to have two years away.

ASH: And what did you do? Those were two separate sabbaticals.

BRISTOW: 1967-8 and 1987-88, in Oxford, England, near the city of Oxford.

ASH: And you were doing research there?

BRISTOW: Yes. Both times were ninety-plus percent research, and those were fantastic years. I learned a huge amount.

ASH: And your Kaiser year was a sabbatical year as well.

BRISTOW: That was a sabbatical as well, off this dead end direction. Had it been five years later, I think we would have prevailed, and I would have stayed in the health care research business because suddenly that became a hot area.

ASH: It is now.

BRISTOW: It is now, but it wasn't hot enough to get funded or published then, for me.

Effects of the Great Depression

ASH: I have on my list, and we'll go way back now, the effect of the Depression. This was prior to your decision to go into medicine, but you were here in Portland at the time.

BRISTOW: Yes and no. We moved here in 1937, and it started in '29, so by '37, I guess for my family there still was a depression, yes.

ASH: But probably any effect on your education or □

BRISTOW: I think so, in this sense; I mentioned that nobody had ever graduated from college in our family. My dad had gone to college for a term or a year, I've never been certain which, and then that was it because they couldn't afford anymore. So I certainly did not come from a privileged, well-educated background. However, my parents both had an extremely strong sense of curiosity about anything, and it was very clear from the day that I could spell "school" that I was going to go to college. It was not something we ever talked about, it was not something we discussed or negotiated, it was just what you did. And I think partly that was born of the Depression in that they had a hard time, and I think they felt, at least, that had they been better educated they wouldn't have had such a hard time. That may or may not be true. But I always had the feeling from my dad that he believed that, and he was sure as heck committed to

the idea that I was going to get an education. I have no idea what he would have done had I said, “No, I’m not going to go to college.” I was young enough that it never entered my mind not to do whatever seemed to come next.

ASH: And we know what he did with your brother.

BRISTOW: Well, that’s right. My brother didn’t want to go to college, and, by God, he persevered until he finally graduated from college about four colleges later. You don’t necessarily have to type that up (laughter). But there was this feeling that education somehow, intuitively, was going to be very important to this family and that their lives would have been better had they been better educated. And that may be true. They did have some hard times in the prewar years. And, then, when our kids came along, we didn’t talk about it much either. Two of the three ended up with doctors’ degrees, though, and they all ended up being very well-read, academically-oriented people. And, of course, we take, *I take*, a fair bit of pride in that. [To Mrs. Bristow] How about you?

K. BRISTOW: I would think so. Well, you ended up going also to Willamette rather than to one of the state universities.

BRISTOW: Right.

ASH: How did you make that decision?

BRISTOW: I don’t know that I made that decision (laughter). I think I was sixteen, and I only knew about two or three schools in the country, anyway. I had not thought much about it. I was in high school, and so it was decided that I ought to go to a small school. Perhaps because Willamette was a Methodist college and my parents were rather devout Methodists— Willamette, was at that time a Methodist strongly affiliated school. It was close to

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

ASH: probably had an influence on what you did with the rest of your life.

BRISTOW: Oh, there's no question about it.

Kay Bristow

ASH: So it's very relevant to what we're talking about. What we missed on the tape was that Kay majored in chemistry

BRISTOW: No, I met her in chemistry.

ASH: You met her in chemistry.

BRISTOW: Right. I recall that I was a little slow in deciding what to do with my life and knew I had to get a major, and all of a sudden, in my junior year of college, had a lot of catching up to do. French was not going to get me into medical school, et cetera, and so I needed to take chemistry, biology, and so on, and we met in a general chemistry class in my junior year, where her first comment was to declare that she certainly wanted nothing to do with the likes of me. I still hear that periodically (laughter).

K. BRISTOW: He says I said that.

ASH: I won't ask anymore about that. But you, and if you don't mind my asking you some questions too, but you were in San Francisco, and you were in Portland, and you went to England, so that during Dr. Bristow's career you did a fair bit of moving, so you set up households in different areas.

K. BRISTOW: We moved thirteen times the first thirteen years we were married.

ASH: Just in case that doesn't get on the □ thirteen times in thirteen...

K. BRISTOW: Years.

ASH: I see.

BRISTOW: A lot of apartments here in town; we moved from one to another.

K. BRISTOW: Yes. You know, in and out, up and down, over and

BRISTOW: Packing and unpacking.

K. BRISTOW: Across the porch. So yes, I did move a lot.

ASH: But you never had to move across the country, so I guess

K. BRISTOW: Oh yes. We were in the service; we moved to San Francisco for training.

BRISTOW: And San Diego, and then Albuquerque.

ASH: Albuquerque. I had forgotten about that one.

K. BRISTOW: And we had two little boys then, and he always went on (inaudible).

BRISTOW: The low point of my career was moving to Albuquerque. They [the family] were in San Diego with the car, and I showed up for work, and they told me I was going to be an obstetrician, and that was a fair blow. Then they arrived, and both children promptly got sick and were hospitalized in the base hospital, and I wasn't quite sure what was the matter with them. So I had this new career as an obstetrician, our only kids sick in the hospital being taken care of, and then she got sick at home, and everywhere I turned there seemed to be calamity on the horizon.

K. BRISTOW: And packing boxes all over the house.

BRISTOW: Yes. The house was just—all the boxes in there. I guess we got a bed put up for you to lie on.

K. BRISTOW: They did that, yes.

BRISTOW: So that was the low point. It had to be uphill from there.

ASH: And it sounds like it was.

K. BRISTOW: (Laughing) Sometimes.

ASH: I'm going to check my list again, here, just to make sure, because we talked about your clinical role, your research role, administration, but□

BRISTOW: I was kind of an amateur at that.

ASH: And you didn't have to do it for very long.

Training Programs

ASH: Women and minorities, curriculum changes; changes in training programs we didn't really talk about. Maybe I should ask you if there were dramatic changes in the training program.

BRISTOW: I think only in terms of content. At the residency and fellow level there's an awful lot of one-on-one, one-on-two, one-on-three training, and I don't think that that's changed a whole lot in the last couple of decades. If you're going to teach somebody surgery, you've got to teach them one-on-one; and I can't foresee that that's going to change very much, and that's the level where most of my effort was given, not surgery, but at the post-residency training.

ASH: One of my other things is payment for services, and I have a note that you were chief of medicine in 1972 when the first practice plan began, and in '73 when the Multnomah County Hospital went to the state.

BRISTOW: Yes, I was involved with that. I mentioned our attempt at a practice plan and that we didn't do very well and closed it down. I think John Benson was the first secretary/treasurer or president—no, he was president, and maybe I was secretary □ At any rate, we were called University Internists, PC, and we did not succeed.

About that time alternate ways for paying for health care for people who did not have much money were either here or on the horizon, and at the same time the cost of medical care was beginning to be a real onerous burden for counties, and so you saw all over the United States county and city hospitals closing—the Philadelphia General Hospital has a huge edifice; bingo! It closed down—and a restructuring of health care in inner cities. So the Multnomah County Board of Commissioners decided they wanted to get out of the hospital business, and we had no idea what that would do to—well, we had some idea of what that would do to us in terms of numbers of beds and people on the Hill. It made all important the university hospital, but we certainly didn't want to lose the county hospital. That was still a very important element in our teaching resources.

I spoke at the City Club, in fact, defending the university having the Multnomah [County] Hospital and the support of it by the county. My pitch was that there were a lot of things on the horizon that were going to take care of poor people, but they weren't all here yet. So even though it was extremely desirable for the indigent population to have choice (which Medicare provided for many people) even though that was very important, unless it was really available now, a lot of folks were going to get disenfranchised. And I said that there would be a calamity in medical education as well, if we lost these beds.

Well, I was right and I was wrong. The calamity in medical education was softened when the state got the hospital for some small sum of money, and private practice came into play, and there were ways found to fund the hospital for quite a while. I think I was not wrong in the disenfranchisement argument. Medicare came, but if you weren't sixty-five and you were poor, there was not much to be done for you. And a lot of people who had been able to come to the county no longer could do so with ease because the county was out of the hospital business. Fortunately, the

state still picked up a fair bit of the bill, but, as you know, over the years that had to erode, and what we have now is a lot of people who are disenfranchised. So, [that was] one of the arguments that I made about trying to preserve some kind of health care in desperation for people who were not eligible for plans that were around, like Medicare. I think that argument was sound, unhappily.

Private practice was after my time, really. When I had an administrative role, all I did was begin to fill out the checks.

ASH: Well, I've gone through my list. We've talked about space, we talked a little bit about Town-Gown relations, we talked a little bit about technology. So let me ask you if I have missed anything that I should be asking you about.

OHSU Life

BRISTOW: No, I think you know more about me than I do now (laughter). I don't think so.

Maybe one final comment about life here. The kinds of jobs I've had around the country since around 1970 have allowed me to see life in institutions all over the United States, from Harvard to UCSF to Podunk County Hospital, and there is an element of working here that I should have commented on much earlier, and that is a certain spirit of collegiality which really made the difference in me succeeding or failing. I mentioned Herb Griswold asking me what I wanted to do, and that really represented a bit more than just good times and lots of money. It represented a commitment to seeing a young person succeed. And there was a lot of that as I was growing up. People like Herb Griswold and Jim Metcalfe and others, Howard Lewis, were very much committed to helping new people, and that helping would extend to sharing of equipment or space. It might have been easier for some of those people not to do that, certainly less inconvenient, but it was the spirit of the institution. As I look at other institutions where I can see laboratory doors close as certain people walk down the hall because they don't want their own colleagues spying on each other, I think what a

blessing it was to grow up at this place. As we get bigger and more competitive, it will be a little less personal than it was when I was faculty member number whatever, but I think there still is a commitment to, administratively and at the level of individuals, trying to help new people get on with their academic and professional lives. So I was privileged not just by the times and the money and a few people I happened to be lucky enough to deal with, but also, I think, an institutional □ oh □ philosophy, if you will, that was one of trying to help people grow. I don't think I imagined that at all; I think that was a real phenomenon, and I hope it's preserved.

ASH: Well, it also seems to me, from what you've been saying, that you carried that on with the fellows.

BRISTOW: I certainly tried to do that, and with junior faculty with whom I worked. I mean, if my entire career really depended on things I could get done because somebody helped me with a little space or a little money or a piece of equipment, you can't very quickly forget that, and it has to influence one. If it's successful for me, it surely would be successful for somebody else. And that really is not the case in all institutions. I don't know where you and your husband originated, but there's sort of a bias out West that there's a difference between East Coast academic medicine and West Coast academic medicine.

ASH: He trained at UCLA.

BRISTOW: Okay. So he was, I think, part of a West Coast tradition, at least as I would think of it. It's dangerous to generalize. But I do know people who have been kind of abused, even in their own institutions, by lack of people chipping in to help them when they had something, really, to offer. And Oregon has been quite the reverse. We may have paid a price for that by being kind of homey over the years, but those days are gone, and I think we can preserve collegiality and still be competitive on the scene.

Organizational Culture

ASH: One last related question, then. Are there other ways you can see the organizational culture, or can you describe the organizational culture here, perhaps, as being different from the other places you've seen?

BRISTOW: That's a hard one. I tend to think that organizational things are partly structure, 30 percent, but there's 70 percent choice of individuals. You could replace Peter Kohler and Joe Bloom with a couple of people who could make this place collapse, if they were allowed to, over the span of five years. So the organizational structure is important, but so are the people, but more important are the people in the jobs in the organizational structure. So I think I'm less concerned with the structure, partly out of ignorance, I suppose, but very fervently concerned with whom the people are who take these jobs.

OHSU Leaders

ASH: Leadership, in other words.

BRISTOW: Oh yes, absolutely. And it hasn't changed with any sort of modern personnel management theories that there might be, as important as they might be. Ultimately, it will come down to people working together or not, and leading other people. And I don't mean to imply that there's only one way to do that, but it has to be individual success, I think, in doing it. You can take the best system in the world, and it still won't necessarily work with the wrong folks.

ASH: Who would you, then, tell me were the great leaders in the history of our institution.

BRISTOW: Well, I only go back so far, but certainly David Baird was. I think we would not have dared to be another ten years late in building a university hospital.

Howard Lewis was a general internist, but he saw the subspecialty world coming, and as much as he might have loved in his heart to resist it, he did not, and he built himself a modern department of medicine in the

sixties, with well-trained people from everywhere. So he certainly was an important influence.

In my own field Herb Griswold, as I've written in that little piece I've given you, was a visionary. Herb had a hard time focusing on all the trivial details, but when it came time to think about a program project grant and bringing in seven million, or whatever it was, he could look ahead and see the big picture and was a very important influence throughout his career. A lot of things would not have happened in cardiology without him.

Again, there's been a lot of controversy about Leonard Laster, who was a president you may have heard about. He did two things in addition to christening us OHSU, which is a name that has stuck after some other iterations. Leonard went downtown to the Rotary, he went to the legislature, he went to the medical association, he went everywhere and waved the flag in a way that it had never been waved before. As I mentioned, maybe repeatedly, a lot of our budget in the early days was the state legislature, and there's a tendency, then, to kind of go hat-in-hand down to Salem and do some begging, and if your budget is mainly from that source, you do a lot more begging. Well, the transition was occurring, and Salem was still terribly important to us, but a little less important than it used to be. And Leonard would go downtown and tell people how good we were. Leonard would drive all over the state—I went with him to a couple of places—and he would meet with any group that was willing to meet. They could be local merchants, they could be doctors. Get them together, and we'd have some spiel prepared to tell them about the great things on the Hill. So I think Leonard Laster gets a little bit more credit than people have given him for being a champion of the cause here and putting the university into the public's eye. A lot of us were brought up in a day when public relations and that sort of thing was something we just abhorred. But, of course, you have to realize who's paying all the money, who's paying my salary or paying the hospital bills, et cetera, and you have to be sensitive to that, and Leonard was. And so he went out to try to educate and satisfy the bill payers: the state legislature, the medical association, the public, the Rotary. And I think he deserves a lot of credit for that. He got into a lot of difficulty when he then would come back to the Hill and briefly try to micromanage something—I'm sure you've heard

those stories over and over—and that was tragic. But on balance, at least, what he did for us off the Hill I find very important in our history.

Then we finally settled down to being an integrated university, integrated between the various schools, and, of course, Peter Kohler has had a phenomenal record of success making that work.

I'm sure I've left out people. I've left out individual departments that have been so successful. Ken Swan's department, for example. I'm sure you must have interviewed Ken.

ASH: I have already, yes.

BRISTOW: I surely hope, because he's a very good example of just saying, "I'm not going to have a Town-Gown conflict." And so what he did was to develop a fantastically collegial, productive relationship all over the city. There's a very important object lesson, I think, from Ken and Fritz Bowen.

So there are a lot of other people, I'm sure, but those people stand out as having been major players along the way.

ASH: Well, I'm going to turn the tape off now, if I think we've covered everything on my sheet, and...

[End of interview]

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