

SUMMARY

Dr. Kenneth C. Swan was the first full-time paid head of a clinical department at the University of Oregon Medical School when he joined the faculty as Professor and Chair of the Department of Ophthalmology in June 1944. A 1936 graduate of the School, Swan left the state to intern at the University of Wisconsin. He then took a residency at the University of Iowa and spent three years on the faculty there before returning to Oregon. In these interviews, Dr. Swan looks back on sixty years of the School's history and his own distinguished career in ophthalmology.

Three topics dominate the discussions in these three sessions: Dr. Swan's own research, his efforts to develop the Department of Ophthalmology through the "four F's" – facilities, faculty, funding, and the family of patients and supporters – and the vision of Dean David Baird, which set the course for the institution's development in the 1940s, 1950s, and 1960s.

Dr. Swan describes several of his research projects at length, including his efforts to create inhibitory analogs for acetylcholine; his development of artificial tears, which was the first medical use of methylcellulose; and his contributions to advances in imaging technology.

In discussing the history of the Department, Dr. Swan emphasizes the support of the Oregon State Elks Association and their "declaration of interdependence" with the Department, which enabled the development of the Elks Children's Eye Clinic – the first such facility in the nation. He also names other prominent donors and describes their contributions to the Department and to the Medical School.

Dr. Swan talks about several prominent faculty members and former trainees who have been associated with the Department. He describes his efforts to promote excellence and creativity and to encourage faculty participation in national organizations. He notes that these efforts have secured the department's prominence on the frontier of ophthalmology.

In developing a mission for the Department of Ophthalmology, Dr. Swan was ever conscious of being a part of a larger entity. The mission is therefore a reflection of the broader mission of the University as a whole, and collaborations on funding and research activities were pursued across departmental lines. Dr. Swan emphasizes the role of Ophthalmology, and especially of Dr. John E. Weeks, in the development of campus facilities such as the Library and the University Hospital. Dr. Swan also talks at length about the vision of Dean Baird and his efforts to broaden the scope of patients, develop a full-time faculty, and bring the School to national prominence

TABLE OF CONTENTS

Medical School Years	1
Internship at Wisconsin	5
Residency at Iowa	7
Joining the Faculty at Iowa	11
Pharmacological Research	12
Coming Back to Oregon	15
The Vision of Dean Baird, I	15
Funding the Department, I	17
Increasing the Scope of Patients, I	18
Dr. John E. Weeks	21
Mission of the Department	23
Developing Faculty	25
Funding the Department, II	28
The Vision of Dean Baird, II	30
University Hospital	32
Oregon State Elks Association	38
Increasing the Scope of Patients, II	41
The Vision of Dean Baird, III	42
Activities on the National Level	44
Research Activities	46
Looking Back on a Career	49
Casey Eye Institute	50
Notable Faculty Members	51
Index	54

Interview with Kenneth Swan, M.D.
Interviewed by Joan Ash, Ph.D.
August 18, 1997 [Interview 1]
Site: Dr. Swan's office in the Casey Eye Institute
Begin Tape 1, Side 1

ASH: I am in the office of Dr. Kenneth Swan in the Casey Eye Institute, and the first question I started asking him before the tape was rolling was: I understand, from looking through the files, that you actually graduated from medical school at the University of Oregon Medical School?

SWAN: Correct.

ASH: And what year was that?

SWAN: I started right in the depths of the Depression and graduated in 1936.

ASH: Can you tell me what it was like?

SWAN: Yes indeed. At that time, the Medical School was a branch of the University at Eugene, and the only buildings we had up here were the basic science building, the Mackenzie; and the Doernbecher Hospital, the old Doernbecher which was attached to the Outpatient Clinic, which then of course was Multnomah Hospital; and in the background was Emma Jones Nursing Hall. At that time, there was only full-time faculty, full-time department heads, in the basic sciences departments. The clinical departments were all run by volunteers.

ASH: How many full-time faculty do you think there were?

SWAN: I think there were probably fifteen or sixteen as I recall.

I want to add in another building because it's so important as a contribution of Ophthalmology, and that is the Library. And one of the people who contributed a great deal to the early development of this medical school has received relatively little recognition: that was Dr. John E. Weeks, who was a very distinguished ophthalmologist who practiced in New York City and was nationally known for his work. He was also one of the founding members of the American Board of Ophthalmology, which was the first specialty board. But he retired to Oregon to live with his daughter and her husband Dr. Frank Mount at Oregon City. But Dr. Weeks' major contribution was our first library.

When I was in medical school here in the 1930s, the library was up on the third floor of Mackenzie Hall, just a small space, but Dr. Weeks believed that a medical school should have a library and that it should be the heart of its educational program. So he contributed

\$100,000. This was the time in the Depression in the late 1930s. He was instrumental in obtaining a matching grant from the Rockefeller Foundation; and then the WPA money came in. And that was our Library/Auditorium, which he helped make possible there. But—

ASH: Did you know Dr. Weeks?

SWAN: Yes, I did, but only later when I can back to be Chairman of the department. The people with whom I was most associated were, first, Dr. Harold B. Myers, who also was a great contributor. Dr. Myers was Professor and Chairman of Pharmacology; and also he was the Associate Dean, and because Dr. Dillehunt, the Dean, was on a volunteer basis more or less, Dr. Myers was actually the on-the-ground dean. I had the good fortune to be selected by him in my sophomore, the end of my sophomore year, to be a medical student research assistant in Pharmacology, so that I had some contact with him knowing something about how the School functioned. But it was his introduction—working with him was my introduction to research and the decision to seek an academic career.

ASH: Something I should have asked you to start with—I didn't start with your date of birth and where you grew up, but I at this point probably should step back and ask you where you grew up and what took you into medicine?

SWAN: I was born in Kansas City, Missouri, but our family moved to Oregon in 1913, so we consider ourselves more or less Oregonians. I went to high school here, going part time because it was Depression time and I was working in the afternoons. Then I had three years at the University of Oregon down at Eugene. At that time, you could complete the four-year program and get a bachelor's degree by having the first year of medical school count toward graduation, so that I entered medical school in 1932 and graduated from the University in 1933 at the end of my freshman year up there.

ASH: And then how much longer was medical school beyond that? Three years?

SWAN: Well, a total of four years. My first year of medical school combined my third year of college, the third year of the University, with—

ASH: So it was a seven-year program?

SWAN: Yes.

ASH: I see. But what made you decide to go into medicine?

SWAN: Well, my father was associated with the Bausch and Lomb Optical Company, so I had some contact there with science and medicine. And I actually aspired to enter medicine to be a part of contributing to society. I guess that sounds sort of trite, but that really was my feeling.

ASH: It's interesting that you went in ophthalmology also with his being associated with Bausch and Lomb. Were you interested in the eye to start with?

SWAN: Not especially, but during my third year in medical school, I did a research project on the eye which involved studying a component of the pituitary gland, the pressure principle, working on the iris, and I found then that it had a significant effect in rabbits but not in humans. But that intrigued me, the opportunities for research in ophthalmology as well as being able to do things *for* people and not just *to* them. You see, at that time, there were very few specific medications, except in ophthalmology where we had drugs that would be effective for glaucoma, for example. But in general medicine, there were very few—the wonder drugs hadn't come along. Insulin had really just been discovered, that was the major one; but the old standbys were belladonna and phenobarbital. Ophthalmology offered something more specific. Cataract surgery, benefiting people, restoring their sight, and—all of which intrigued me.

ASH: And they were doing those things when you were in medical school?

SWAN: I didn't make my final decision until internship at the University of Wisconsin—

[Phone rings.]

Excuse me.

ASH: [Laughing] Rolling again. So when you were here in medical school, what was the curriculum like? Did they divide it between basic science years and clinical years?

SWAN: Largely, at that time. The first years were anatomy, histology, biochemistry; we got into physiology in the spring, but there was really no approach to the clinical side in that first year. The second year we began to work in physical diagnosis and some clinical subjects then were introduced to us. But there was considerable division. Pharmacology was given—pharmacology and therapeutics was in the sophomore year, but then we really began our clinical work in the junior year. But because I was working in research during the summer, I was able to do some of my clinical work in the general medicine clinic between the second and third years, which made it easier for me, then and during the following year, to continue to research work in pharmacology.

ASH: Was it fairly common in those days that medical students were interested in research here, or were most of the students aimed towards clinical work?

SWAN: At that time, it was the depth of the Depression, and most in the class were just striving to get through and survive there. In fact, we lost a couple of members of my class when the bank holidays came along in '32-'33. It was a desperate time. And at that time, my Rockefeller student research assistantship paid thirty dollars a month, so at a dollar a day I was one of the richest people in the class there.

But actually, there was very little research being conducted except in the basic science departments. Dr. Osgood was working in hematology and his work was nationally

known, and that was a stimulus to us; but there was practically no clinical research. In fact, there were no full-time chairmen of any clinical departments at that time. The residencies were still in the development stage. Ophthalmology was a so-called practical residency of one year. So that I knew by the time I was a junior or senior in medical school that if I wanted to specialize I would probably—other than in medicine or surgery—have to seek training elsewhere after graduation.

ASH: I see. During medical school—I'm trying to get the picture of what it was like to be in medical school during the Depression, and you said that you lost a number of medical students, probably because they couldn't pay?

SWAN: On financial basis there.

ASH: Was medical school expensive?

SWAN: No, it wasn't really at that time, fortunately [laughs]. But it was a nice—it was a very close-knit group of people. Everybody knew everybody, and we brought our lunches or ate in the cafeteria in the basement of Mackenzie Hall very conveniently; and most of us took the bus. My junior and senior years, I was in a carpool with Dr. Charles Holman, who would later be Dean. He had an old Ford and he would pick us up and we would all ride together. We were all very closely knit together.

ASH: So he was one of your classmates?

SWAN: Yes, he was one of my classmates.

ASH: So how did most of the medical students pay for their medical school tuition?

SWAN: Well, a high percent of our class worked on the side, so-called externships, working in the clinic, after-school jobs there.

ASH: And you got paid for that?

SWAN: Yes, so I had an after-school job during my first year; and then at the end of my sophomore year, when I got that research assistantship, that dollar a day made me rich, so to speak. But I lived with my parents, as practically everyone did. There were a few older people in our class who lived on their own, but most lived with their parents. There were only one or two who were married; they were practically all bachelors. The several ladies who were in the department were single too.

ASH: There were female medical students?

SWAN: I call them ladies; they were, all of them [laughs].

ASH: This is intriguing, because one thinks that medicine was a male profession back then. So our medical school did have some female medical students?

SWAN: Oh yes, I think there were six ladies in our class. At least four or five of them finished. One of them, Jane Northrup, who practiced in New York before retiring, was out for our sixtieth class reunion. There were eleven of us for that, survived of the class. We graduated fifty-six, and I think eleven of us were still able to attend the sixtieth anniversary.

ASH: Isn't that wonderful? Then, there were six female medical students who started out in your class—

SWAN: I think we lost a couple along the way but I believe there were five or six graduated.

ASH: And went into practice?

SWAN: Yes, and went into practice, or—well, practically everybody went into some kind of practice. Dr. Holman and I, I believe, were the two from our class who went into full-time academic work.

ASH: About how many medical students, in all, were there?

SWAN: Well, let's see, our class graduated fifty-six, so you can multiply that by four and get an idea. The medical students far outnumbered the residents and interns in those days. That's no longer true.

ASH: Oh? I'm still interested—

SWAN: You see, there was practically no graduate training. We had residents in medicine, surgery, OB/GYN, and—let's see. Ophthalmology was one year and otolaryngology was a one year service.

ASH: But you all did internships?

SWAN: Yes, that was required in those days.

ASH: That was. So that was one year. And did most medical students do it here?

SWAN: No. Well, I really can't answer that. I think a majority were in the local area, but because of the absence of internships, most of us—some of us, by necessity, had to go elsewhere. Through the good graces of Dr. Assistant Dean Myers, I was able to have an appointment at the University of Wisconsin.

ASH: That must have been a big move for you.

SWAN: It was a big change moving from here to a Midwestern school, and a school where the clinical faculty was full-time there. All of the department heads with one or two

exceptions were full-time; and the Dean, Dean Middleton, one of the most distinguished internists of the time, was the head of Medicine and actively worked on the service there.

ASH: So how would you describe your internship year? Were you working on the side when you were an intern?

SWAN: No, in those days, internship was twenty-four hours. It was room, board, laundry, and no salary: zero. So we had no opportunity—we couldn't afford to do anything [laughs] with our limited income. There were two other Oregon graduates who went to Wisconsin at the same time I did. One of them was Dr. Clarence Poor, who's in the San Francisco Bay region; and the other was Vern Turner. And all three of us arrived there with hardly a penny left in our pockets, so we lived at the hospital.

ASH: You slept—you literally lived at the hospital?

SWAN: We lived at the hospital [laughs].

ASH: You had no other apartment?

SWAN: [Laughing] No, none of that luxury. But everyone was very closely knit, and worked very closely. Wisconsin had made a point of bringing in people from all over the country, so that it was a great experience working with people from around the country. And I found that the basic education which I had had at Oregon was comparable to the best that I saw in the internship level, although we had just a volunteer staff. Our teachers, like Laurence Selling, Howard Lewis, people like that, had given us a very, very fine education, a base in general medicine. And we had a good, solid education in the basic sciences. Dr. Larsell, Olof Larsell, was nationally known for his work in anatomy; and Dr. Myers, whose career terminated early with coronary heart disease, was a leader in pharmacology research there; and Dr. Ed West, who came on later, when I was still here, of course was outstanding in biochemistry. So the educational level of our small school was high, compared to others.

ASH: It sounds like you had several classmates then who went on to become deans.

SWAN: Dr. Holman was the one who became Dean.

ASH: Was Dr. Larsell ever a dean?

SWAN: No, Dr. Larsell was Professor and Head of Anatomy and—by the way, have you read his book *The Doctor in Oregon*?

ASH: Not yet, but I should, shouldn't I?

SWAN: Right.

[Pause.]

ASH: So you're in Wisconsin for your internship, and you're living at the hospital, working twenty-four hours a day. Were you at that point determined to go into ophthalmology, and did they give you much extra information about ophthalmology?

SWAN: I was torn between ophthalmology and internal medicine, being influenced by Dean Middleton there, but I decided to go ahead in ophthalmology because I saw, there at Wisconsin, that it was a field that was going to change and was rapidly developing. But this ability to make specific diagnoses and specific treatment, and the surgical aspects, restoring vision, were intriguing to me. And the work that I'd begun with the action of drugs on the intraocular muscles intrigued me, so that when the opportunity came to go for residency at the University of Iowa—which was very research-oriented in ophthalmology—I was fortunate to get in, to be accepted there, in a four-year program.

ASH: Now, they didn't have the matching program and all of that back then—

SWAN: There were no matching programs for internships, but there was sort of an informal exchange—like Dr. Myers, who was my chief here in Pharmacology, was a Wisconsin graduate, and so there was sort of a loose exchange. So he was generally able to get two or three Oregon graduates into the Wisconsin program, and Oregon, in exchange, without any sort of formal agreement, would take at least one or two Wisconsin graduates there.

ASH: And what about—

SWAN: Over the years, many of the Wisconsin graduates, once they were out here in internships, stayed on in the territory.

ASH: Was there the same type of informal connection, then, between Wisconsin and Iowa?

SWAN: Not at that time, that I know of.

ASH: And how did you end up at Iowa? Was there someone at Wisconsin who knew someone at Iowa?

SWAN: No—actually, here in Oregon, there was an Iowa-trained ophthalmologist, Dr. E. Merle Taylor, with whom I had established a working relationship in the eye clinic here to test some of the drugs that I had worked on in the Pharmacology Department. But he put in a good word for me, as did, of course, Dr. Myers.

ASH: So that's how you ended up at Iowa—for how many years?

SWAN: Well, I stayed on, on the faculty there. Iowa gave me the opportunity to continue research training along with the clinical training; and also, my chief there, Dr. C.S. O'Brien, was a leader in developing graduate education. His program of graduate education differed from many others around the country in that, in many of the programs, you took a

so-called basic science course and then, in the residency, there was purely clinical training. But O'Brien had a different scheme of things. He believed that the basic training, the basic sciences, should be incorporated with the clinical training. So in that residency, it was one of the first in the country to have organized classwork during the actual residency to tie it together. And that sort of set a model for me, when I came out to Oregon later to set up our program.

ASH: So when you were a resident, you divided your time between the classroom and the clinics, and the courses—

SWAN: The classwork was usually conferences and classes an hour each day, and then the rest of the time was in the clinic. The research activities I had to do at night and on weekends, because the clinical load was heavy there.

ASH: Did they have laboratories for you to work in?

SWAN: Oh yes. Yes, the Ophthalmology Department at Iowa, under O'Brien, in addition to a pathology laboratories, they had microbiology, biochemistry, biophysics. They had an ongoing—and have continued down through the years to have research labs as an integral part. This established clearly in my mind that if I ever had the opportunity to develop a department, research activity was going to be an essential part of the program. And it's been here, ever since the last fifty years or so.

ASH: When you were a medical student, what were the laboratories like here?

SWAN: The only clinical laboratory for research was Dr. Osgood's, in experimental medicine and hematology. The research that I did here on the autonomic drugs in the pituitary principle was in the pharmacology laboratory.

ASH: And there was a laboratory?

SWAN: Yes, as part of the teaching program. It wasn't a specific laboratory—well, yes, it was; a small laboratory space where we kept preps.

Dr. Myers was a leader in hormone therapy, and one of my jobs as assistant to him was the feeding of ground-up beef testes—which we got from the stockyards—to rats, old rats. And I would kill and weigh the prostate gland on the controls, those fed and those not, and there was a difference. But also I was working on the lipid chemistry, and that was my first contact with Dr. Laurence Selling, who was a great leader in our time at this medical school. He was Head of Medicine and also Head of Neurology. Inspirational man, wonderful man.

ASH: And now, tell me again how you worked with him. Were you in his lab, or you were associated—

SWAN: Well, Dr. Selling didn't have a lab. I worked in Pharmacology, but Dr. Selling had gotten me interested in the levels of fatty lipids in the serum of patients with multiple sclerosis. And that research proved to be negative, but it was wonderful. We didn't find any direct connection. But it was the experience of working with him, and the stimulus, and learning his way of thinking. He had a wonderful attitude toward patients.

ASH: So you worked with him one on one, or was it a classroom situation?

SWAN: No, one on one.

ASH: One on one, as part of your research project, I see.

Now, back in those days, there wasn't an NIH to fund this type of research.

SWAN: No, NIH didn't come along until the '50s.

ASH: Then how did this get funded?

SWAN: Through the—Dr. Myers had the Rockefeller grant there; that program.

ASH: And that was how he paid *you*; did that also buy equipment and animals?

SWAN: Yes, some; I really can't—yes, it did buy some of the animals and equipment, right.

Of course, he was carrying on his own major project. He was also ahead of his time in that he was thinking—the term antibiotic wasn't there at that time, but he had discovered that something in the volatile oils, thymol and those oils, affected fungi. And the reason he discovered that: he was working on a project up in the Hood River valley. Workers were getting fungus—working in the orchards—were getting fungus infections in their fingers. And then he realized that the reason housewives added thymol and menthol and those agents to their jellies was it kept fungi from growing. So he applied that to a wash, to control fungal infection in hands. It was thinking—and the antibiotic era was some years away yet, but you can see he was thinking along those lines there. He never got recognition for it.

ASH: What exciting times those were! So that was something you knew about as a medical student?

SWAN: Yes. We had another project [laughing] which was of no great significance later, but we had a little project—the police department wanted some help in apprehending drunken drivers. And we developed a little system whereby they could breathe into some tubes with reactants which would show the presence or absence of alcohol. The local press grabbed it and called it a “drunk-o-meter” [laughter]. It was small stuff and really nothing original but—

ASH: But it made the *Oregonian*?

SWAN: [Laughing] It made the *Oregonian*. It was my first public release, other than for activity on the golf course.

ASH: So this was when you were a medical student? All of these things happened when you were a medical student here?

SWAN: Right.

ASH: Activity on the gold course?

SWAN: Yeah. Oh, that's nothing.

ASH: Were you doing that as a medical student?

SWAN: No, I had no time for golf after that [laughter]. That was just in college.

ASH: Certainly as an intern you had no time to do anything else. What about when you were a resident?

SWAN: Then Dr. O'Brien, our chief there, encouraged all of us in the residency program to do research and it was considered a part of the learning process there.

[End Tape 1, Side 1/Begin Tape 1, Side2]

ASH: Side two of the first tape, and I'm still talking to Dr. Kenneth Swan. We're talking about residency days and the research activities during residency. And I'm getting a picture that when you were a resident, you went to lectures, you did practical clinical work, you did research in your spare time; did you have time to do anything else?

SWAN: Very little. I was able to get married in my second year of residency. And, by the way, Dr. O'Brien appointed at that time no married residents. He always appointed residents as single people, but after you proved yourself, then he sort of allowed you to get married [laughs].

ASH: Did he come to your wedding?

SWAN: No, because our wedding was a weekend in Omaha [laughs]. He let me have Saturday and Sunday off to get married [laughter].

ASH: It must have been hard to—I'm married to a physician—and it must have been very hard to be married to someone who was working *all* the time.

SWAN: Well, at Iowa, my wife was working in the labs too. She was trained in medical technology, so we both worked.

ASH: But you saw one another because you were together there?

SWAN: Right.

ASH: I see. And that was when you were about what age?

SWAN: Well, let's see, 1937 to 1940, and I was born in 1912, so I was still literally a boy [laughs].

ASH: Doing your residency in Iowa and now married.

SWAN: Right. Nineteen thirty-eight, I think, we were married, and have been married happily ever since.

ASH: Congratulations. I guess that was a good start in Iowa, working together.

SWAN: Good start, right.

ASH: At the end of your residency, then, you had a big decision to make.

SWAN: Right. The opportunities for practice were looking good at that time in 1940-41, but I elected to stay on. It was a four-year training program and I elected to stay on. In 1941, I received a grant from the John and Mary Markle Foundation. They had not started their—they were just experimenting then with what was later the Scholars in Medicine program: looking for young people in all fields of medicine who were research oriented and who could do basic science research, and helping them along. That Markle grant permitted me to stay on there.

ASH: Now, what was the application process like for something like that?

SWAN: I've forgotten the details of that. It was largely through Dr. O'Brien. I wouldn't have gotten it without his help in carrying the ball. It was my first experience in grant writing, however, something I—

SWAN: So you did have to write a proposal?

SWAN: A proposal, right.

ASH: But you stayed at Iowa; and were you appointed to the faculty?

SWAN: Yes, as an assistant professor there. Then I was called to active—I had been a reserve officer five or six years, so I was called to active duty in 1941, July. But I had a urinary tract infection at that time and didn't pass the physical, so I was put off; and I was finally discharged from the Army in November of '42 with an honorable medical discharge. If we had had antibiotics earlier, I would have been able to—because that took care of the problems. This had been a complication of a pneumonia I had had in medical school.

ASH: All the way back to medical school?

SWAN: That's where it had gotten started. But that's unimportant now [laughs].

ASH: Well, yes and no, because—

SWAN: And anyway, after that I came back to work with Dr. O'Brien at the department. I stayed until 1944, and during that time, I was doing work on drugs that weren't available because of the war, drugs like atropine derivatives, which were imported from other countries.

ASH: When you say that they were not available because of the war, you mean you could not experiment with them?

SWAN: No, I mean for general use. Supplies of many of the agents which were derived from plants in Asia and Africa, were threatened by the war cutting off the supply. So I was working to develop substitutes for some of the derivatives of atropine. We were successful.

ASH: You were? Can you tell me about that?

SWAN: Yes, I can—well, that's quite a long story; is it all right?

ASH: Well, yes. I think it's really exciting to think about your being fairly recently out of your residency, a new faculty member, and making a discovery.

SWAN: All right. Turn it off just a second while I think.

[Tape stopped.]

ASH: We're talking about the discoveries.

SWAN: The drugs I was particularly concerned with were the so-called autonomic drugs, drugs which worked on the sympathetic and the parasympathetic nervous system. Of course, these were very important in ophthalmology to control the size of the pupil for examination, and the focusing muscle of the eye for refraction, and also for the treatment of inflammatory disease. These same agents, which are all derivatives of atropine and scopolamine, were also used in general medicine.

ASH: And they come from plants?

SWAN: Yes. The other name for atropine was belladonna. The agents which were in particular critical shortage were the short-acting ones like homatropine. Now, the concept that I had was to take a drug called acetylcholine, which is a physiologic compound which transmits nerve impulses across synapses—to take it and modify its structure so that it would

compete with normal acetylcholine, but not fulfill its function, and thereby act as an inhibitor. So the concept was one of inhibitory analog. And this concept was entirely new at that time.

So I had a young biochemistry major who was working towards his degree, by the name of Norman White; and so, with his help, we started modifying the acetylcholine to change its physical characteristics, which we were able to do by adding on different compounds. And lo and behold, we found a series that would block the action of acetylcholine. And in those days, we didn't think of patenting things, although Merck and Company—the only reason we approached Merck and Company was to get them developed and available, but it was sort of considered unethical for doctors to profit from any kind of discovery. Times have unfortunately changed. So practically all of the short-acting drugs that are used today to dilate the pupil and to relax the focusing muscle are derivatives of the Swan-White analogs of the 1940s. If I had—if we had gone ahead with the patenting, then we could have had a Casey Eye Institute a lot earlier [laughter].

ASH: What an incredible story! So at the same time you were doing this fascinating research—it must have been very exciting—you were also teaching?

SWAN: Yes, I was teaching then, because so many of the other faculty members were called into service.

But the other agents with which we were working, one was the methylcellulose, which we discovered was an agent which would make water viscid as well as provide bulk. Now, at that time, methylcellulose had had no medical use, but we found that by dissolving it in water, we could get a clear viscid solution which could be a substitute for tears and also to provide contact with examination lenses in the eye. So that was the first artificial tears, methylcellulose, and the first use of that compound. Now it's in ice cream to provide bulk, and all kinds of things.

ASH: Did you make this discovery with the same co-investigator as the first discovery?

SWAN: Yes, he worked with me—this was in 1944, and actually the full development of that went on when I was here at Oregon in 1945.

ASH: So that spanned two institutions?

SWAN: Two institutions.

The other agent with which we were working was the so-called wetting agent, surface-active agents, which we used to facilitate penetration. Now surface-active agents are part of everything, dermatologic preparations, and they're used as preservatives in eye drops and contact lens solution.

ASH: And that was why you were working on it?

SWAN: Yes, we were the first to discover the use of those wetting agents to facilitate contact with the tissues.

ASH: But it also sounds like—

SWAN: But we didn't do any patenting [laughs].

ASH: What you were doing, you were doing it as part of your ophthalmology, but it had spin-off implications—

SWAN: In other fields, right.

ASH: In other fields. So, for example, this wetting agent, was that adopted by a drug company?

SWAN: Everybody. [Laughing] All drug companies now use those in some—and particularly—not only drug companies but manufacturers of cleansing solutions, laundry preparations. Detergents are in everything. Of course, detergents were discovered before our time, but we applied them to eye solutions as a preservative and to facilitate absorption into the tissues.

ASH: So you had a very active research program going on at Iowa, and you were doing some teaching, and I take it you were seeing patients?

SWAN: Seeing patients there. I was particularly interested at that time in developing pediatric ophthalmology programs. Iowa had what was called an orthoptic clinic, one of the first in the country, for treating—working with children with disturbed binocular vision, crossed eyes, that kind of program. I was interested in that, too, and studying it, along with other disease processes.

ASH: So you were doing clinical research on that?

SWAN: On that. There weren't enough hours in the day.

ASH: And what did the war—you've mentioned some of the impacts of the war, in that you were one of the few faculty who were still teaching because others were called away—

SWAN: Of course of the young faculty; the older were there.

ASH: But then, what about the patients? Were you getting patients coming to you with injuries related to the war?

SWAN: Not when I was in Iowa, but later when we came back to Oregon we saw a large number here in our clinic, the one we got developed here.

ASH: So your interest in children—

SWAN: Started there.

ASH: Started there. Then, what caused you to make the decision to leave there?

SWAN: Well, the opportunity—I was offered an opportunity to go to Stanford Medical School, which was then still in San Francisco. And also I had an opportunity to go to New York. But I wrote to Dean Baird out here in Portland, who by that time had succeeded Dr. Dillehunt as Dean. And I had had some contact with Dr. Baird when I was with Dr. Myers; and Dr. Baird, when I was in school, was head of the Outpatient Clinic there. So, I got a telegram from Dr. Baird saying not to accept a position until I was interviewed by him, and then there was a follow-up letter saying he was coming back to the Midwest and he would come to Iowa—he may have had some other reason to come too. But I was interviewed by him and Ralf Couch, who was then the administrator there.

ASH: So you were very actively recruited?

SWAN: He was—Dr. Baird, I'd like to say some things about him, because he was such a wonderful man, and so much of this school's development is a result of his philosophy and his planning and his following through.

ASH: When did you first meet him?

SWAN: I met him in medical school, when I was still doing—because I had to have approval from him to do research on patients in the eye department; but also working in the clinic. In those days, medical students and the faculty and people like that were really in close contact.

ASH: So you went and talked to him personally about this, and he gave you the permission. So that was the beginning of your relationship with him? And later, you were his—

SWAN: Actually, it was an interesting story. They didn't call it experimenting on humans—and I guess someone had reported that we were doing this. And I remember going in to see Dr. Baird, and he said, well, work with patients isn't such a bad thing when it's based on scientific evidence and will benefit them. Those weren't quite his exact words, but basically that was the message. So I left greatly relieved there.

But the time he came back to see me, he was just in the second year of being the Dean here, and he would make some tremendous transitions. He believed that it was necessary to have some full-time people heading departments in the clinical field, and Dr. Kiehle, who was then Head of Ophthalmology, was quite elderly and wished to retire; so Ophthalmology, as I recall, offered the first opportunity for him to appoint someone on a full-time basis to be Chairman. But my appointment to come out here was as Associate Professor and Acting Chairman. So he was taking a big gamble by appointing a thirty-two year old when, by

tradition, the seniority determined who would move up to be Chairman; and also, he was setting a new tradition by appointing a full-time Chairman of a clinical department there.

ASH: Well, obviously, he wanted you to come very badly if he traveled, went out of his way that much when travel was not easy.

SWAN: I wouldn't be so egotistical as to say that [laughter]. I think he was touring elsewhere.

ASH: Well, touring in Iowa? But anyway, he made a point of coming to visit you and recruit you.

SWAN: He reviewed the program and liked the way Dr. O'Brien had developed the Iowa system, whereby the faculty were there full-time; they saw private patients, as well as indigent patients; and the residents and fellows participated in seeing patients at all levels—that broadened the scope. So Dr. Baird was faced with some other problems at the time which make a whole new story—maybe we can? [Pointing to recorder.]

ASH: Oh, we've got about ten minutes.

SWAN: Ten minutes? Fine. At that time—this carries back into my first years here at the Medical School, that is, patients for teaching here on the Hill. With the exception of some patients admitted to Doernbecher Hospital, who could be of all economic classes, otherwise all of the teaching was done with indigent patients. And we could see indigent patients from all over the state, but the only hospitalized patients, adults, were patients who were eligible for free care in the Multnomah County Hospital. So they had to be indigent patients of Multnomah County. So you can see how limited the scope of patients was. At that time, the Veterans Hospital was not accessible for teaching to the Medical School. So in addition to—

ASH: Not at all?

SWAN: Not at all, at that time.

ASH: But it was right here?

SWAN: Right here, right. Even though the Medical School had given the land for the development of the Veterans Hospital.

So, among the problems of developing some full-time faculty members to head the departments, Dr. Baird was faced—he recognized he needed to increase the scope of patients for the students and the residents to learn from. And also, of course, right along with that, he saw the need for the other resource: facilities. So he was thinking not only of developing programs, but developing the resources—that would be the faculty, the facilities, the finances, the support of patients—and all of this he saw based on looking ahead at what was happening, not only the needs of the Northwest, but also the national picture and what was

happening in medicine. And he saw we should no longer be just a little medical school, a branch of the University, but should broaden out into a true medical center serving everyone and having research, and graduate as well as undergraduate teaching. This was his vision and his way of approaching it a step at a time.

The first opportunity for a full-time clinical department head was Ophthalmology, and it was a wonderful opportunity for me. And of course, one of the things I remember him telling me was, “You have no facilities there, just a little clinic; and only the financing that you bring with the Markle grant; but the thing you have a lot of is opportunity” [laughs]. And that’s true; it was a wonderful opportunity.

ASH: So you moved back to Oregon.

SWAN: Moved back to Oregon. We bought our first car, automobile, and we had to buy a second-hand one because of the war. But we limped across in it and got here [laughs].

ASH: You drove from Iowa to Oregon.

SWAN: Right.

ASH: For this opportunity to—and you reported to Dean Baird, at that time, as department head, and you were suddenly now in an administrative position that you had not been in—

SWAN: I had had—Dr. O’Brien had trained people for—part of the academic training was to give some administrative responsibility there. So I had had some administrative experiences running the department when he was away back there, which was wonderful experience.

ASH: A good thing you had it.

SWAN: I learned that when you control the funds, you control a lot of things [laughs], about the planning of the program; that’s essential. That was an important lesson.

ASH: When you arrived here, what was the funding like? Was there any money coming in from patients at all?

SWAN: No, there was no patient income except what the Medical School got from providing for the public welfare system.

ASH: A lump sum?

SWAN: A lump sum. People now talk as if capitation were a new development with the HMOs, but actually we were practicing capitation here by seeing the State welfare patients on a capitation-like system there—except most of the service was provided by the students and the volunteer faculty.

ASH: So the volunteer faculty, and I assume—

SWAN: The volunteer faculty—I can't say enough about how people like Dr. Selling, Dr. Stearns and that group of people, Dr. Joyce, and Dr. Kistner, how much time they devoted to teaching up here and providing first-class education. Wonderful group of men.

ASH: They were practicing in the community?

SWAN: In the community, and were wonderfully generous with their time.

ASH: So they would volunteer days—

SWAN: I named only a few of them, but there were a large number of them. They were wonderful people.

ASH: And these were the faculty in your department?

SWAN: No, these were in the departments here in the Medical School. When I started here in '44, we literally had no faculty. The volunteers would come up for short periods. But the Department was seeing less than a hundred patient visits a month, and many of those were repeaters, so the service was sort of on the small side. Coming from a busy program at Iowa to this was quite a change.

But your question about the financing: the Markle Foundation paid half my salary; the Medical School paid part; but then I was put on what was spoken of then as the "Harvard system," or the geographic full-time, where you were paid part-time but you worked full-time, and were permitted to have private patient income. That was sort of formalized in the fall of 1944; and this again was breaking ground, because only Dr. Osgood was seeing paying patients, in connection with his work with Hematology. So it was set up that I would be permitted to see paying patients, *if* they were referred by a doctor. I have a copy of that old first statement. It was the first breakthrough in seeing referred patients up here.

ASH: You have a copy; do you know if there is a copy in the library?

SWAN: I doubt it.

ASH: Oh. Could we have a copy?

SWAN: Let me see if I can find it for you. Are we through?

ASH: We have a few more minutes of tape. Could we keep on going? I'll make a little note to find that after the tape goes off. So that was—I'm going to call it a paying patient—

SWAN: It broke ground.

ASH: So finally, then, the Medical School would have some financing beyond tuition funds, in that faculty could be paid for their clinical work?

SWAN: Correct.

[Pause; rustle of papers.]

Here it is. Part of the program was that if any of those patients qualified for free care, they got it.

ASH: But if they didn't qualify—

SWAN: Then they were referred; those were the circumstances. Let me have Michelle make you a copy of that.

ASH: This is the memo titled [reading] "Admission of Non-Indigent Patients to the Eye Department of the Outpatient Clinic for Special Diagnosis." So these were patients who had been referred by physicians in the community?

SWAN: Right. I'll have Michelle make a copy.

That was the beginning, because the scope—the main purpose, the goal, was not to provide salaries, but to widen the scope of patients. Dean Baird saw, and it was evident to me too coming here, that, how could we train young doctors for the whole scope of medicine when they saw such a limited population?

ASH: Tell me how they were different?

SWAN: Well, many of the patients from Multnomah County were people who had chronic illnesses or were elderly and had no support—this was before really there was a Social Security and that kind of system. So young people—very few came in. There was a big gap there between this largely elderly group of low-income, largely Multnomah County people, and the children's pediatric group at the other end; in the middle, this large group were lacking for either teaching or clinical research.

ASH: At this point had you already developed your interest in children?

SWAN: I was beginning that. [Rustle of papers] I've got some material on that if I can find it for you, to start the children's clinic. And that was the forerunner to this great program that we've had for a half-century with the Oregon City Elks Association, which is a big story in itself.

ASH: This memo is dated November 16, 1944.

SWAN: I had just been here a few months.

ASH: The children's clinic started when?

SWAN: I think about 1947. Dr. Baird and Ralf Couch made it possible to get a little extra space up on the fourth floor, and by getting that running and functioning, we had something to demonstrate to the Elks in '48 and '49, that we had a viable program that had great potential and would do two things: it would provide us a wider scope of patients and permit us to treat patients who were really in need, that were not getting care; and at the same time it offered the Elks the significant statewide program which would be of enduring value to them. And also that was a critical problem at that time, which I'll tell you about later, with retinopathy of prematurity, which we call retrolental fibroplasia. So they were looking for a program, a worthwhile program, and we were looking desperately for help and support.

ASH: How did you get together?

SWAN: We had patients. A judge—well, later he was a judge, Mr. [Moby?] of the Oregon City Lodge.

[End Tape 1, Side 2, and interview 1]

Interview with Kenneth Swan, M.D.
Interviewed by Joan Ash, Ph.D.
August 19, 1997 [Interview 2]
Site: Dr. Swan's office in the Casey Eye Institute
Begin Tape 2, Side 1

ASH: Once again, I am down at the Casey Eye Institute where I am talking to Dr. Kenneth Swan. We talked for about an hour yesterday and we got up to the point where—well, in the 1940s, let's say about 1944. But after thinking it over, we have both decided that we'd better go back a little bit and review a little bit of what we talked about yesterday.

And, I'm especially interested in Dr. Weeks and his association with OHSU. You knew Dr. Weeks when you were a medical student, if I recall; and as I see more of the documentation, it seems he had quite an influence on the campus. And I wondered if you would go back to when he first came here from New York and his association with—the Rockefeller Foundation?

SWAN: Correct. Well, Dr. Weeks was a major contributor to the development of this medical school, converting it to a higher standard. He was, as I said yesterday, a national leader in ophthalmology, particularly in education, and in the basic sciences. He was in his nineties when he came to Portland, but his history goes back into the nineteenth century. He was a personal acquaintance of Louis Pasteur and also of Koch. Actually, Dr. Weeks represents an era of—he began with a discovery of the germ theory of disease, working with Pasteur and actually discovered a particular organism that caused conjunctivitis, which was known as the Koch-Weeks bacillus for many years. When he came back to this country after—

ASH: That was the Koch-Weeks bacillus?

SWAN: The Koch-Weeks bacillus. The co-discoverer was the famous Dr. Koch in Europe. When Dr. Weeks came back to this country, he established the first eye pathology laboratory in a university setting in this country.

ASH: Where was that?

SWAN: That was in New York. So it was natural that he was interested when I got into contact with him in the mid-1940s and came back to establish a department here. He had a major interest in having us establish the laboratories.

ASH: When he first came to Oregon, he gave some funding for the library. How did that all come about?

SWAN: The story of it is in his biography. There's an excerpt in *Northwest Medicine* [rustle of papers], which was the Northwest medical magazine of the time.

Dr. Weeks believed that no medical school could be a true educational center without a medical library. So he worked with Bertha Hallam, who was our librarian at the time, and was working in a little sort of—almost a cubbyhole on the third floor of the old Mackenzie Hall. But Dr. Weeks gave a personal contribution of \$100,000. And he had influence with the Rockefeller Foundation from his practice in New York; he was instrumental in having them match his own contribution. And then Dean Dillehunt and Associate Dean Baird were able to get WPA money. That's how we got our first real library and auditorium.

ASH: Was this one of the first times that this medical school had received outside funding?

SWAN: I can't answer that, but certainly one of the few times that they did, at that time.

ASH: And it was a rather large amount of money at that time?

SWAN: A hundred thousand dollars, in 1939, was a very large sum.

ASH: Tell me—

SWAN: The auditorium and library opened in 1940. Now at that time, I wasn't personally acquainted with Dr. Weeks because I was away, but I knew of him from my medical school days and my interest in ophthalmology.

ASH: Why was the library not named after Dr. Weeks?

SWAN: It's my understanding that this modest man did not want it to be named after him. There is a plaque in the entrance of the auditorium with his profile on it, but that was the limit of his recognition.

But my contact with him came in 1944, when I came back to start to establish the Department of Ophthalmology. He was a tremendous help in his ideas in marshalling support.

ASH: Now, what was his official role at that time?

SWAN: He was an honorary—he was a member of the clinical faculty there. He had been seeing indigent patients, but primarily in his office. But he encouraged me to go ahead and get a laboratory in pathology and microbiology going, so we could get a research program going. He was especially interested in my getting started with a residency training program.

ASH: You were thirty-four—

SWAN: Thirty-two years old.

ASH: Thirty-two years old. How old was Dr. Weeks?

SWAN: He was about ninety-three or –four then [laughs]. I would go out to his house and visit him, on his invitation. He enjoyed seeing movies of surgery. At that time, surgical movies were a novelty; they were first being done. I had learned how to do them at Iowa and so he enjoyed seeing those films of cataract operations.

ASH: And how was his health at the time?

SWAN: His health was failing, but he was mentally alert. I saw him as a patient, and also Mrs. Weeks, who at that time was beginning to develop cataracts. The attending physician was Dr. Joseph Paquet as his internist; and Dr. Paquet can tell you a good deal more about his history.

Now, Dr. Paquet, although he was an internist, was a strong supporter of the early Department of Ophthalmology; and, as you know, our community services dental clinic in the Casey Eye Institute is named in honor of Dr. Paquet.

ASH: Is he someone I should interview?

SWAN: Absolutely. Dr. Paquet has a wonderful history of medicine in this region.

ASH: And he's still in the area?

SWAN: Yes, he is, and he would certainly be someone with whom you should talk.

ASH: Wonderful.

SWAN: Well, to carry on with Dr. Weeks: I discussed with him how the Department should develop, and Dean Baird was part of several of these discussions. One of the things that contributed to the success of our department over the years is, we've always had a clear-cut mission, with specific objectives within that mission. The mission has always been, also, within the realm of the Medical School.

[Pause; door closes.]

The importance of the mission is that everyone in the Department, although we started with only three or four, knew our mission, knew what our goal was. And we did things on the basis of principle; we made decisions of what to do on the basis of principle rather than expediency. This is something that always held the Department together in a team effort.

ASH: And was Dr. Weeks helpful in your defining the mission?

SWAN: Yes, particularly in relation to the basic science applications to ophthalmology. He foresaw the importance of the basic sciences, particularly pathology and microbiology, but he also foresaw the important developments that were going to happen with the new drugs in pharmacology also. But one of the things that he saw, which I discussed with him and the Dean, was facilities, the development of facilities.

ASH: What did you have at that moment, when you came back?

SWAN: We were on the second floor of the Outpatient Clinic. We had three rooms: we had a room that was an open room in which we had partitions, partial partitions, but—so we could examine more than one patient at a time; but the person in the next booth would hear what was going on in the first booth. We had one slit lab biomicroscope, which was our major piece of equipment. We had a room which was more or less a storage room in the beginning, but which we converted for visual fields and a darkroom; and then I had a tiny little office, about ten by ten, and the hallway leading into that little office was for my secretary. Then we had a room, around ten by fifteen, which was a minor surgery and treatment room. We had a treatment chair in there. But that was the sum of our department to begin with.

ASH: No laboratory?

SWAN: We had no laboratory in the beginning, there. The basic science departments were very helpful, notably Biochemistry: Dr. West set aside some space for us. And then in 1945, Dr. Baird assigned us a room in Mackenzie Hall where we could get set up to continue the research I'd started at Iowa.

ASH: This was your laboratory?

SWAN: Yes, in the beginning. So we were not rich in facilities. But I'd like to get back to what the missions were.

The missions of the Medical School were basically what they are today: research, teaching, patient care, and community service. For us in Ophthalmology, we had some specific goals—I should mention education. So our goals in the Department were to meet those objectives, but to develop the resources. Planning is no good without the resources. And the resources, I think, are the four F's: developing a faculty, developing facilities, developing financing, and then developing the support of patients and the community; and in the process, serving those latter two groups. So that in determining the specific objectives, we had to review what the needs of the territory were and what we could see in the future development.

In 1945, when I became formally Chairman of the Department, and Professor, there were some critical needs. The State of Oregon had only three ophthalmologists who practiced ophthalmology alone and were certified by the American Board. There were large areas of the State who had no ophthalmologists at all. So one critical need was to develop a

training program to train ophthalmologists. And for me, that was a particularly important issue, because as a graduate of this medical school, I had to leave the territory to get training.

The setting up of a residency training program had a dual purpose, however. One was to train ophthalmologists for the territory; the second was to develop faculty. So faculty development has been a part of our residency training program dating back to 1945. We had to develop our own faculty, so to speak, on a pretty slim economic basis.

ASH: So can you tell me the relationship between the residency training program and faculty development?

SWAN: Yes, they've always been integrated. But it meant, in the selection of residents—we selected residents, candidates, on the dual basis of what their intentions were in relation to practice in the community, and secondly, as potential faculty members. But all of them in the beginning were part of the team contributing to the Department. We were very fortunate to have an outstanding group of residents in those early years, all of whom contributed in some way or another.

ASH: And did most of them become faculty?

SWAN: Well, among the first group, Dr. Talbot and Dr. Leonard Christensen were the first to; Dr. Christensen was my first full-time faculty member. When he finished his three-year residency, he had already shown some research interest and some interest in eye pathology. So he was awarded a fellowship. He spent a year in New York and Chicago studying eye pathology, and then came back to work in the Department. In the meantime, we were fortunate to obtain a grant from the Kellogg Foundation, which we shared with the blind commission, which financed his early years here and set up the laboratory—which was a very important part of our later development. Without a basic laboratory, even though we were a clinical department, we weren't in a position to contribute to the great advances which were just beginning in so many fields. The philosophy was, the best way to keep up with progress was to contribute to it and be a part of it.

ASH: Now, I want to go back to your four F's, because I lost the last one. It had something to do with the community—

SWAN: We call it the family of patients and supporters. We tied them together because over the years, our patients, the people who knew us best, have been our major contributors, both in obtaining support in the community and in their own contributions.

ASH: Now, the grant from the Kellogg Foundation: was that something you went after yourself?

SWAN: Yes, we did, very vigorously, and there's a story behind that also. Dean Baird played a role because he was highly respected in this country, and the Kellogg Foundation people had contacted him for advice and support. And on one of their visits here, one of the members of their staff developed an eye problem and I examined him as a patient, and had the opportunity to go over with him our needs. And at the same time, I was also

working with our state blind commission, which had just been reorganized. So the Kellogg Foundation was at that time supporting, not directly medical schools, but public health organizations; that was their main focus. So, the grant was jointly between the Oregon Commission for the Blind and the Medical School; it was a five-year contribution, \$25,000, which was big money in those days. Now with that, that permitted us to set up the eye pathology laboratory to work to determine the causes of blindness in Oregon—that was a part of the project.

ASH: This was the laboratory in Mackenzie Hall that now became outfitted? Is that right?

SWAN: Right.

ASH: And that was the Kellogg Foundation?

SWAN: Right, it helped us get that started. Without that laboratory, we wouldn't have gotten additional support from Dr. Weeks later, which I'll tell you about; and it the groundwork to get the first NIH grants which came along there. That was crucial to get that established, as well as later to get support for research that grew out of there.

ASH: What was the year of the Kellogg grant?

SWAN: I think it was about 1948 or '49—maybe '49. Let's see. Or maybe it might have been 1950. I'd have to look that up.

ASH: But basically, at that time, you had a department; you had a small faculty?

SWAN: We had Dr. Swan, the residents, a secretary, and a nurse. That was the extent of our department in the '40s.

ASH: No other paid faculty?

SWAN: No, Dr. Christensen and Dr. Talbot stayed on, but I don't think they became faculty members until 1950, '51, somewhere in there. We had at that time just the opportunity [laughs]. We didn't have the resources, the facilities. We were still developing.

ASH: So you personally were teaching medical students, doing research, training residents, grooming new faculty. Did you ever have any time for anything else?

SWAN: Well, not too much, but I had good support from some of the volunteers in the community, like Dr. Taylor continued to give some time, there. But support from the other faculty on the Hill, particularly in the basic sciences faculty, was very important. Dr. Larsell and Dr. West were particularly important to us in those early years.

Let's see, developing other faculty: there was a Dr. John Harris who played an important role in those early years, too, that I want to tell you about. My first acquaintance

with Dr. Harris was at Iowa when my research lab and his lab were on the same floor of the university hospital there. He was working towards his degree in biochemistry, and I was doing my research in ophthalmology. So at the end of the war, 1945, by that time he had had his Ph.D. in biochemistry and had already been nationally recognized for his work on blood preservation. He wanted to get his medical degree, so he joined the Department as a research assistant while he got his degree in medicine, and then he stayed on as a member of the faculty and continued his research.

And when he came here, the association with Dr. West in Biochemistry was particularly important. At that time, Dr. Harris had also established a working relationship with Dr. Howard Mason in Biochemistry. But Dr. Harris soon became nationally known for his research on the mechanism of fluid formation in the eye and the transfer of it. And while he was still finishing his medical training, he received an award from the Association for Research in Ophthalmology; it was called the Friedenwald Award.

ASH: When he was a medical student?

SWAN: While he was still getting his degree.

Now, he stayed on our faculty until 1957 when he was hired away from us by the University of Minnesota. He became Chairman of Ophthalmology at the University of Minnesota and developed a strong department there. He was one of the early faculty people. That was sort of an inexpensive way to obtain faculty, by bringing someone in to get his medical degree who was already distinguished in his own field of biochemistry.

ASH: And he must have come here partly because he knew you?

SWAN: Our association in Iowa, that was a fortuitous one. But that's the way the faculty sort of got organized in the beginning. But we began to receive contributions from patients who saw the need with us and shared our vision of what we wanted to do.

And I need to give you a little more perspective on things. At the end of the war, during that period, although we had fine doctors in Oregon, there were relatively few specialists, and it was common practice for people who had a serious, complicated problem to leave the territory.

ASH: This was during the war or after the war?

SWAN: In the early years after the war, there were relatively few. I had the experience many times of making a diagnosis and then having the patient want to go to San Francisco or the Mayo Clinic or to New York. So one of our goals was to develop the facilities and the faculty and supporting staff to provide services that people wouldn't have to leave the territory for. And that meant the establishment of a basic mission that has served us for now more than fifty years, and that is, we felt it our responsibility to bring new advances in ophthalmology to this territory rather than have them trickle in years later.

And part of that, because we are a highly technical field, was the development of an evaluation and training of other doctors in new technology. So we were the first to develop, for example, photography not only of the exterior of the eye but also of the retina and interior, in this territory, and to use angiography on the eye, and later to develop microsurgery, and later it was the—let's see; what's the term I want to use? The photocoagulation treatment. And then we were the first to use lasers for treatment. So that was part of the basic mission that we started with way back then.

ASH: Now, had these things been done elsewhere and you learned about them and then put them into practice here, and you developed some of them here?

SWAN: Both, right. One of the hard lessons I learned early in the development of the Department was the importance of interchange with other institutions around the country, something that Dr. Fraunfelder and our present faculty has sustained here. And to do that, it's like any other kind of trade: you have to have something to trade. So unless we were doing research and developing new technology to exchange with other institutions, we couldn't do it. So that was a part of our basic mission.

ASH: And how did you do that? Were there conferences that the faculty went to and gave presentations at? How did you—

SWAN: Because of having creative people here. For example, Dr. Roger Flanagan, who just passed away here a few weeks ago and practiced in Coos Bay, was one of my first residents. He was a very creative man who never went into academic medicine; he went into practice—but he was very creative. He developed the first electromyography on the extra eye muscles. He published very little, but the basic—he developed the feasibility of that, and it was widely used by other people later. That's the kind of technology that was developed.

Dr. George McCallum, who was my first resident and later practiced in Eugene, was interested in photography; and with Dr. Flanagan, they developed—they put together the first strobe light system. It hooked up on the outside, it had no shield, and those were the first strobe light photographs taken of the eye anywhere in the world. It was that kind of—the spirit of doing things—

ASH: New. And then they went to meetings and presented results? That takes funding; going to meetings takes funding.

SWAN: Right. We received support from a number of sources, private support; individual citizens like Aubrey Watzek here in Portland, for whom the Watzek Award at Lewis and Clark [was named], was a strong early supporter. His mother was a patient, and I performed cataract surgery on her, so he had first-hand information of what we were doing there.

ASH: And how did all these things happen? You make it sound so easy; it almost sounds like people are just handing money to you. How do these associations happen?

SWAN: I think people coming and letting them know what we were trying to achieve and how—and what the importance of it was, to the region, was a key to this. [Laughing] It's the way I respond to things, and, I guess, you do unto others as you do unto yourself. Letting them know the needs of the territory—because so many of them were patients or family of patients, it was a personal relationship there.

Behind you is a sign, the Hoyt Ophthalmology Fund. Now, that Charles Hoyt was from Silverton, and he was a patient who, one day when I was examining him, I was looking at some slides taken from secretions from his eye—I think this was the way it began. I had an old microscope there and I said, “It will take a little time to do this,” and he said, “Aren't there better ones than that?” And I said, “Yes, but they cost a lot of money,” and he said, “How much?” And I said, “Well, the new Zeiss camera,” which was the first one that you could take the photographs through, would cost around, I think it was around \$15,000 even then. So he said, “Okay.” So we got our Zeiss, and that microscope served us for many, many years there.

But then he set up a fund and—always along this line, we considered ourselves to be a part of the Medical School. We were not empire building on the side, we were part of the School; and so when his wife expressed an interest in nursing, we encouraged that so when they finally gave...

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

ASH: [Reading from the plaque] “This endowment supports research and education in ophthalmology and a scholarship for student nurses.” So this partly came about because he was a patient and saw a need here. And the next—can we look at these, or are we out of sequence here?

SWAN: Well, we can talk about some of the others.

[Pause.]

ASH: We have one for Knowles, and one for—

SWAN: Peter and Neal Moody, there. Let me go on a little bit more about the background here.

We've always encouraged people to give to medical causes; and some of our patients wanted to give to the Medical School per se, and we encouraged them to do so. The overall development of this institution is number one, and we were part of it, contributing to that overall development, rather than developing ourselves in an isolated way. That was the belief of everyone in our Department in the early years, and is still today. We have shared; and when people have wanted to give to children, we've shared a number of grants with Doernbecher Hospital, and also with Shriners. Developing the overall institution as well as the Department has been a key part and has been helpful to the institution, and has encouraged people to contribute.

But now to go on with this account: Josephine Knowles was referred to me from a doctor in Oakland, California. She was an elderly lady with a complicated problem. She came back and forth by train, and when she was here she would always like to go—she had no children; she would always like to go to our children’s eye clinic to see them, and see what we were doing. So I encouraged her in her later years to go back to be taken care of in California because it was so hard for her to travel, but she insisted on coming up here, fortunately for us. Her other love was the Humane Society, care of animals. So when she passed away in 1963, we were surprised to see that—I knew she was going to leave some money—but surprised that it was a trust fund established in the Crocker National Bank in San Francisco—I’m not sure that’s the proper name of that bank—but it was over a million dollars, which we shared now for more than thirty years, at least a minimum of fifty to sixty thousand dollars a year. When the trust terminates, which I believe is in the year 2005, it will all come here to the Department of Ophthalmology, and will probably be in the range of two to three million. She was a lovely person, and she liked the personal attention she got here and she liked what we were doing with helping children.

So that’s how most of our bequests have developed: letting people know that we care about people, and knowing what our mission is.

ASH: You know, going back again a little bit, we’ve left Dr. Baird, and I’m sure that in these early years as a department chair you worked with him. And you indicated yesterday you worked very closely with Dr. Baird, and I wondered if you could tell me something about that relationship.

SWAN: First of all, it was very, very fortunate, and I think the whole territory’s fortunate that he became Dean in 1943. He was a man with a mission, and not only that, he had plans to accomplish that mission and he had the organizational ability to do it. And he was a good judge of people, and also he was above any sort of pettiness. He didn’t get into any little squabbles about things and he worked on principle. When you’re working toward a goal and working under principle, you don’t do a lot of little expedient things that come back to haunt. So he set a wonderful model.

His mission, as he outlined it to me and the other people in those early days, was first of all education. He recognized how well the School was doing in the basic medical education, in the basic sciences; and he saw the importance of continuing having volunteers in the community be an active part of the faculty, because he himself, even when he was Dean, continued in part-time practice at the Portland Clinic for quite a few years. Now, he considered it that important, because he saw as patients many of the leading people of the area that he needed for support.

But he foresaw the need for specialists in all the fields; that, and the development of residency programs. He also knew that there was this big backlog of need for continuing education, which used to be called postgraduate education, with all the returning veterans from the war there; so postgraduate education and continuing education he saw as crucial. Not everyone saw eye to eye with him on this. There was concern about training too many

specialists, a concern which is still going on, although on a more reasonable basis now than in those days.

Also, he saw the need for development of technical support, laboratory technicians, clinical technologists who do routine clinical studies. He foresaw that need. But he also saw that the time had passed when a man could head a major department like Medicine or Surgery or Ophthalmology and spend all of their time, a major part of their time, in their private practice downtown and only a small part here. He needed people who would be involved in raising money for their departments and also who could conduct research and could actually do the administration. By administration, he meant administration of funds. In the beginning, all the clinical departments here were under a central budgetary management. Ours was the first department to have a budget; it was a small one, but we had one to begin with. He saw the need for full-time chairmen to coordinate and run a modern multipurpose department.

ASH: You were the first?

SWAN: We were the first to have a full-time head of a department.

ASH: You indicated yesterday this was because your predecessor was retiring.

SWAN: Right.

ASH: Now, how did it happen that the other departments—

SWAN: Also, the Markle Foundation provided some funding to help make it possible.

ASH: And then what happened with the other departments?

SWAN: One by one, Dr. Baird was able to bring in full-time people. A major step forward was when he appointed Dr. Howard Lewis to come up here on a full-time basis and to transfer his practice up here on a referral basis. This was a major—of the so-called major, the big departments, this was a major one. I've forgotten the year that was; it might have been 1951 or '52, somewhere in that range there.

ASH: Also at this time, you mentioned that because of returning veterans, you started postgraduate training. What did you mean by that? Was that continuing medical education for people who were already physicians—

SWAN: Right, who needed to be brought up to date.

ASH: They had been away at war, came back, and needed to be—

SWAN: Right, and we had a dual approach to that. One was the cooperative program with the Oregon Academy of Ophthalmology and Otolaryngology. The chairmen of

the two departments were responsible for getting the guest speakers and organizing the program. That's something that we did. We still cooperate with them, but the society now runs its own program.

In the beginning, we did the financing, and to get guest speakers from the East to come out here, I had to go back and participate in their program; it was sort of an exchange program. In those days, there were no honorariums paid, you just paid the expenses of the guest speaker. So it was a dual function, to raise money to pay part and the Oregon Academy paid part. But the big problem was my having to go to reciprocate there. So I did a lot of traveling around the country speaking in various states and regional meetings to do that.

But Dr. Baird also saw the other need, the biggest one, was for facilities; because all we had was the County Hospital. We had the Outpatient Clinic; we had the small Doernbecher Hospital; and we were limited primarily to indigent patients except for Doernbecher. So a major goal—again getting back to one of our four F's, facilities—was to build up facilities on the campus. And number one was a university hospital, which would admit a full range of patients from the entire state. Now, in looking back over the records, you'll find that this was not universally accepted by the medical profession. There was concern that this would provide competition in the community; and secondly, some of the community hospitals, like St. Vincent and Good Samaritan, felt that they could provide the adequate teaching spectrum and get more support for themselves.

So there was some—Dr. Baird had his problems in selling the concept of a university hospital to the Board of Higher Education and the State. He was also handicapped in another way, in that the Medical School was a part of the University at Eugene, and the chief executive officer of the Medical School was in fact the President of the University at Eugene; and the school of medicine here was like the law school and the school of business administration at Eugene. So that Dr. Baird and the Medical School could not make a direct approach to the Board of Higher Education, it had to be through the President in Eugene, routing through; and our budget was a part of the budget of the University, and the University had aspirations for new buildings also. So there was that dual handicap.

But one of the things that Dr. Baird was very effective at was in dealing with the Board of Higher Education and with the Legislature. He was highly respected; they trusted him. He always submitted an honest budget, so to speak, didn't ask for a lot with the idea that it would be cut back. He always presented the real needs and encouraged the rest of us in our departments to do the same. So he developed trust there.

Now, the first attempt at a university hospital did not go through with enough money; so the money instead, then, that first money, was used to build what's now called Baird Hall, the Administration Building. I think that was completed about 1949 or '50. Then came the real battle for the University Hospital.

ASH: When you say the first attempt to get money, was that from the Board of Higher Education?

SWAN: From the legislative appropriation that it had to go through. Dr. Baird was able, when there wasn't enough money to build the University Hospital, the first part—now, this should probably be clarified. I haven't thought about this for so long—but I'm quite sure that was the story. Then when it came to the University Hospital construction in the early '50s, there, we played a part; and here's where Dr. Weeks comes back into the picture.

At that time, our department was well underway, by 1950-51, but we were the only department in the entire Northwest: the University of Washington had not been developed; Vancouver, the University of British Columbia, just had a token department; the University of Utah had not been established; so we were the only ophthalmology department north of San Francisco, and west of Denver and Iowa City. So there was a need for us to expand to serve the region, not just the state of Oregon. So we were desperately looking for new facilities. So this was where Dr. and Mrs. Weeks provided the only money, only private money, that went into construction of the University Hospital.

Now, in order to have a facility which would not duplicate the clinical facility, we, with Dr. Baird's encouragement, developed a plan to develop a single facility that would serve both the Hospital and the Outpatient Clinic. That was done by the design of the overpass building. So Dr. Weeks gave, I think it was \$225,000, to build the overpass building, which I still hope will be named in his honor. [Rustle of papers] Here it is. It connected the Outpatient Clinic to the new University Hospital. My offices were in there, and the offices of our faculty. So we had one room in the Outpatient Clinic; we had the overpass building, and it also served as the connection between the hospital and the Clinic; and then we had approximately one half of the tenth floor of the Hospital. That's where our main clinic was. So instead of having to duplicate biomicroscopes and all the technology, equipment, for the clinic and the hospital, we had it in this central location. That was the place we occupied until they opened the Casey Eye Institute in 1991.

ASH: So that by this time, University Hospital had already been built?

SWAN: No, this was built at the same time as the University Hospital.

ASH: Same time, I see. But this was Dr. Weeks' part, the Ophthalmology part which also served as the overpass between the two buildings?

SWAN: Right. Again, serving the institution as well as the Department needs, there. And that has served wonderfully well. I don't know who is in that space now; I think the Medicine Department may have part. But it put us in a wonderful central location and it made it possible to meet our mission of serving the Northwest in every way.

Now we had clinical facilities there, too. We still had our basic science laboratory in the other building, and then later, when the research building was constructed, we had nice space on the third floor. And again, Dr. Weeks entered into the picture, because he left a bequest, or rather Mrs. Weeks left a bequest, I think it was \$75,000, income to support the John E. Weeks Memorial Ophthalmology Laboratory, which was on the third floor—now, it's on the third level of the Casey Eye Institute.

So, you see what an important role he played. He was very close to Dr. Baird, by the way, in sharing the missions and concepts and giving Dr. Baird a perspective of how medical education was developing in this country, from the European model.

ASH: So Dr. Weeks was retired, and you visited him at his home. When he was talking things over with Dr. Baird, was that usually in the form of informal get-togethers?

SWAN: Informal meetings, right. In the meantime, I was seeing Mrs. Weeks as a patient. Now, one of the reasons why—when I did her cataract surgery, I did it at Good Samaritan Hospital because I couldn't admit paying patients to our County Hospital. In the early years, admission of paying patients at University Hospital was limited too, to meet the concerns of people in the community. The primary basis for admitting patients to the University Hospital was always for their teaching value, as well as to provide a community service for unusual problems. It's since broadened considerably, since then.

ASH: At that time, were Good Samaritan and St. Vincent used for training any of our students or residents?

SWAN: Yes, they were. There was a considerable segment of the medical profession who felt that was the direction we should go, rather than to have a separate university hospital. There were some of them quite strong in their opposition. There was also some opposition to—concern about having full-time department chairman and full-time faculty members, too, in the clinical departments. Concern about unfair competition.

ASH: How would that be unfair competition?

SWAN: Well, now, you show the modern view. At that time, it was thought they would take patients away from the practicing doctors. So there was a town and gown problem here, but never as bad as it's been in some other communities. Now, with the passage of time, that's largely been almost entirely resolved, fortunately.

ASH: But, University Hospital, when it was built, seemed to be a threat to the community?

SWAN: Some people considered it a threat; it never was. But people like Dr. Paquet saw it as an advantage to the community. The majority of practicing doctors saw it that way: as an opportunity to raise the overall standard of practice in the community and as a place where they could come to further their own education.

ASH: Were they at all interested in using this for tertiary care for referring their difficult patients?

SWAN: Yes, they were. Of course, that's the way the so-called geographic full-time system functioned. There were a few departments where the head of the department elected to be on a full-time basis where finances permitted it; but in most of the departments, like

Ophthalmology and Otolaryngology, the faculty were all on a part-time salary and earned their income, with limits, to complete their work. Also in those years, because the surgery on paying patients had to be done in community hospitals, the income there went to the doctor; it couldn't come back to the University because it was done in a private facility. It really was a system that worked out well overall.

Another aspect of Dr. Baird's vision was, of course, support of research. And Dr. Baird was a friend and confidante of Dr. Shannon, who was to become the first head of the National Institutes of Health. And I can remember when Dr. Shannon came here to visit and Dr. Baird took him on a tour and interviewed with all of us—I shouldn't say all of us; a few of us who were then on the full-time faculty there. So he foresaw what the importance of the National Institutes of Health was going to be.

ASH: This was in the early '50s?

SWAN: In the early '50s. And he encouraged us, those of us—when the time came for appointments, he saw the importance of our accepting those appointments.

ASH: Those full-time appointments, you mean?

SWAN: Those appointments on the study sections and the councils of the National Institutes of Health.

ASH: I see. So were you one of the early—

SWAN: I was appointed to the first study sections, the first group of study sections. Ophthalmology was a part of what was called the Sensory Diseases Study Section. And at the end of the first term there, which was four years, it was a very difficult time for me, because I was running the department, developing the department, taking care of patients, having very little support and having to make those lengthy trips to and from Washington—in those days, it was still flying the piston planes, and it meant Portland, Pendleton, Boise, Salt Lake, Denver, and Omaha, [laughing] all the way across the country.

ASH: How long did that take?

SWAN: Well, for the people who served on the NIH committees from Boston and New York, they could go in the morning. But for those of us out on the West Coast, it meant an extra day each way then.

[Pause; short exchange about feedback from audio recorder.]

And at the end of my first term, ophthalmology was split off and I was given the chairmanship of the Visual Sciences Study Section, which was the first one; and I served on that for two terms before moving on. All told, I spent twenty-one years on NIH committees, which meant crisscrossing the country. That was a crucial part. People like Dr. Lewis served, and Dr. Brookhart in Physiology. It was an important part, not only in getting the

grants which we had to compete for, but being in and understanding the policies; and helping to plan the future was a very important part of that function. So I never regretted it, and I met some wonderful people on those trips, but I paid a price in family time there.

ASH: That was twenty-one years?

SWAN: Twenty-one years. There was always something coming up. When the National Eye Institute was set up, I was one of the charter members. I'd also served on the National Institute of Neurological Diseases and Blindness, which preceded the Eye Institute. It was helpful in the development of the Department in bringing back information, helpful to the institution as NIH was developing and changing policies.

We're rattling all over the place, but I guess we're covering the ground.

ASH: Well, we're slowly moving forward in time. We've talked about Dr. Weeks. We wanted to go back to the Class of '36 and talk about Dr. Babson just for a minute?

SWAN: Yes, Dr. Babson. I'm not sure when he took that full-time position. He was either the first or at least the major leader in the development of the neonatology program here at Doernbecher Hospital. Somebody else could probably give you more information, or perhaps you could talk to him.

ASH: So he's still alive?

SWAN: He's in Portland, retired. A great person. You'll enjoy talking to him [laughs].

ASH: And is Dr. Brookhart still alive?

SWAN: No, he passed away. He was Head of Physiology. He's passed away. [Pause] I'm the sole survivor of the department heads of 1950. Everybody else who was a department head in the critical early 1950s is in heaven now; that's where they belong in heaven rather than—[laughter]. All great people

ASH: We're into 1950, now.

SWAN: Except for the Elks children's program.

ASH: And we have a few more minutes or we could do it at another meeting.

SWAN: Why don't we do it in another meeting, so we don't get caught in the middle. I had hoped to be better organized this morning, but everything would lead off into something else.

ASH: While I partly lead you astray because I want to be sure to cover things, and so I probably pull you back and forth a little bit.

SWAN: This was such a wonderful facility that served us for so many years—

ASH: And it's still serving.

SWAN: And in the early 1970s, with money raised from the Elks and patients, we built an extension of the children's eye clinic out on to the roof of the tenth floor. So we went through a whole series of expansions and I don't—the way the Casey Eye Institute is building up, the expansion is not over. We need more laboratory research space now.

ASH: Then we're going to continue this discussion with the Elks.

SWAN: The Elks and also the other developments during those years.

[End Interview 2]

Interview with Kenneth Swan, M.D.
Interviewed by Joan Ash, Ph.D.
September 2, 1997 [Interview 3]
Site: Dr. Swan's office in the Casey Eye Institute
Begin Tape 3, Side 1

SWAN: The 1950s and '60s were two decades of tremendous development and change in the Department. We went from a know-nothing, little-known department to national recognition. I think this was possible only because of the well-organized mission, the development of the programs and also the resources, the ones I talked about before, the facilities. Fortunately, with Dr. Weeks' help we were able to establish that wonderful facility, the overpass building between the Hospital and the Outpatient Clinic, and, in the 1970s, an extension of the children's eye clinic onto the roof of the tenth floor there. And, then, the creation of the Weeks Laboratory on the third floor of the research building gave us the facilities that we needed to be a department of national stature. We had the research, the faculty offices, the clinic facilities. We were opening a new era of subspecialization in ophthalmology with the setting up of the children's clinic.

The finances aspects to support the facilities was an important part of things, too; the beginning of our endowment program and getting support from people like Dr. Weeks and Mrs. Knowles, a patient from the San Francisco Bay region who set up a major endowment program for us at the Crocker National Bank, and, most importantly, the Elks program, which began rather humbly with the project for children with blindness of prematurity. Retinopathy of prematurity is now the proper term for that. But they were wonderful support during those formative years, not only in providing finances, but in sort of a spiritual support, too. The enthusiasm for helping visually impaired children and providing services that wouldn't otherwise be available here, and the recognition and support that they gave us throughout the community was very important. I established some lifetime friendships with many of those early volunteers from the Elks. When I say spiritual stimulation, I really mean that, because these people who had nothing to gain personally would come from all around the state at their own expense for meetings to help our visually impaired children. Their enthusiasm and support helped tie our whole faculty together.

Then, the faculty development also progressed very rapidly during the 1950s—perhaps I should go on with the Elks a little bit more. We saw that—in the beginning it was a declaration of interdependence for the benefit of visually impaired children, but the project grew and grew to involve, first, support of the veterans, our services at the Veterans Hospital by them. The Elks have a veterans committee that provides support for the overall hospital, so we became a part of that. Then, the Elks also began to provide other support, other than equipment: technical assistance, secretarial assistance, but particularly they filled the need for financing new technology. They financed the first laser used for any purpose on a human being in the Northwest. That was back in the early 1960s, they provided that so-called Ruby

Laser of the time. We at that time had really no financial support from the State for new equipment, so you can see how important that was.

But, then, later, the leaders in the Elks Association felt that it wasn't right to confine this new technology only to children when adults would benefit by it also, so there was a gradual transition. Emphasis still on the children's program, but to also provide services, first to veterans and then to other patients, and that's led, finally, to what we now have, the Elks Ophthalmology Center in the Casey Eye Institute. The children's clinic is still the heart and soul of the Elks program, but our adult eye clinic is named in honor of Jim Damon, past Grand Exalted Ruler of the—national Exalted Ruler, who was very active in Oregon in support of our vision program from the very beginning.

I should like to add, too, that with the Elks, a part of our program with them was to help support the School for the Blind in Salem. We have been providing care for them for many years, but they needed help for special education; and one of their first programs was to provide education for parents of children born with a severe visual impairment, to educate them during that preschool period from birth to fifth and sixth year. This filled a very important gap and helped those children and their families get a real start in life which otherwise they didn't have.

So the Elks then went on about twenty years ago—again Robert [Volney?] was the leader—to reassure themselves and us that this program would continue forever. They established a charitable trust, the income from which was limited to expenditures to help the program at the blind school and here at the Medical School. That trust now—what amounts to a trust—now has twenty million dollars in it, and so the endowment is a very significant factor.

We're rather proud of this association because it's—there have been other associations between fraternal organizations and medical schools, but I don't think any quite as long-lasting, and of the magnitude and the significance of this. It's a wonderful example of public-private partnership, and I'm sure it's going to continue there. So the Elks program has been a very satisfying part of my career.

ASH: It started out as the Oregon City Elks?

SWAN: No, it started out as the state association. We were desperately looking for help to finance the study of the children who were born prematurely and surviving but severely visually impaired, and they were looking for a statewide significant program to which they could play an active part and which would be of lasting value and not overlap some other program, so that's how we got this declaration of interdependence started. I'm sure it's going to continue.

Well, that was just one part of the mission of developing the resources. It was important also to develop the faculty, and from the very beginning our residency program had, and still has, the dual mission: training physicians to serve the territory in ophthalmology and also to develop a faculty and develop people for faculty careers.

So that the early ones who we began with were—Dr. Leonard Christensen was really our first one who dedicated himself to academic work; and on the basis of his performance as a resident and some research in pathology, he was the first one from the Northwest to receive what's called a Heed Fellowship, which was an exchange program with other institutions to present the opportunity for advanced training in special fields. Dr. Christensen's was in ophthalmic pathology, because there were no ophthalmic pathologists in the Northwest at that time. So the Heed Fellowship permitted him to spend six months in the Institute of Ophthalmology at Columbia and six months at the University of Illinois in Chicago, Illinois Eye and Ear Infirmary.

In exchange for that, we had to offer the opportunity for other institutions to send people here, and so in the '50s and '60s we had six or seven trainees from other institutions come; and this was very stimulating to us because several of those people who trained here in fellowships had distinguished careers elsewhere. Dr. Breinin, went back to become Head of Ophthalmology at New York University. Dr. Phillip Knapp became one of the most distinguished pediatric ophthalmologists in the country, and there were several others of that caliber. Dr. Stewart Wolff went back to Johns Hopkins to head up their pediatric department. Those were a great exchange of ideas which developed us and got us into communication with the major departments in the country.

ASH: Were those fellowships beyond the ophthalmology residency?

SWAN: Yes.

ASH: Those were extra years, then?

SWAN: Most of them were in pediatric ophthalmology because we were one of the—pediatric ophthalmology did not really become a subspecialty until into the early '50s. Our Elk's Children's Eye Clinic was the first children's eye clinic as an attachment and a part of a university department of ophthalmology. So we were sort of the pioneers in that aspect, and that's why we were fortunate to draw those fine people for the fellowship program there.

But the other part of our faculty development program was—the part that I felt very strongly about was based on my own experience working in the Department of Pharmacology as a medical student. So we offered that program here, and over the years we gave medical students a taste of what the academic world was like, especially research; so that a number of our people who were medical student assistants moved on, not only into ophthalmology, but into other fields. For example, among the people who started with us as medical student research assistants was Dr. Fraunfelder, in his third and fourth year. He worked for Dr. Robert Burns on a type of project which involved establishing malignant melanoma in the eye of hamsters, setting up as a model for determining the effectiveness of various forms of treatment. So that medical student program was a key part of attracting people with academic interests into ophthalmology.

ASH: These were medical students who were recruited to our medical school?

SWAN: No, they were our own medical students.

ASH: Our own medical students who, in their third and fourth years, became interested in—

SWAN: We gave them an opportunity to earn a little money and also to see whether they wanted an academic career. Of course, they gave to us as well as got from us, because with—they sort of provided a tie for us with the other departments, especially the basic science departments and what was going on there. The basic science research was a unifying force between our clinical department and departments like Biochemistry and Physiology and Pharmacology. That, I think, is an important tie for the overall development of a medical school, working relationships rather than a sharp division between the basic and the clinical sciences there.

The development of the other resources was—particularly development of adequate scope of patients for teaching. As I said a little earlier, in the beginning we had—our adult population was primarily an older population of medical indigents from Multnomah County, plus the children at the other extreme. So the development of working relations with the practicing doctors in the community, non-specialists as well as specialists, was an important activity, and that meant going out and establishing working relations. So in my early years here I'd visit as a guest speaker at various parts of the state, at the county medical association, Washington State—Washington, Oregon, and Idaho, Montana, Utah general medical societies as a guest speaker establishing those relations. Locally I participated in the societies that were in fields like neurology pediatrics, which interrelated to our field. This was a key part of developing a patient referral base, as well as finding out from them what the needs of the community were. That was an equally important part of getting out, finding out the needs, where ophthalmologists were needed and what other services we could provide.

The other kind of community service, which was an important part of our development, was work with state agencies and private agencies for rehabilitation and reorientation of visually impaired people. When I came here at the end of World War II, the State's program for visually impaired patients was very poor. The major effort was to support a residence for visually impaired people out on the east side of Portland, but nothing was being done for rehabilitation or restoration by the medically indigent around the state.

So we were asked by the Legislature to make recommendations, and we worked with other groups, the Board of Health—which was called the Board of Health at that time—and the then-existing blind commission to establish a program. The program was approved by the Legislature in 1949 and was one of the leading ones in the country, and not only sight restoration, but prevention of blindness aspects to it, too. I served on that commission from 1949 for almost thirty years afterwards. Subsequently other members of our faculty have served—Dr. Robertson, Dr. Weleber—in playing this important role in helping people get restored. And part of that also is what has led to the development of our low vision program, which we do in cooperation with the Commission yet today and with other agencies too.

ASH: And what is that program?

SWAN: Our low vision program.

Am I recording when I sit back there?

ASH: Yes, it picks up everything very well.

SWAN: So this was our mission: development of faculty; development of the resources; development of the facilities; and development of our family support, the patients and our referral base and our community service with the Elks and state agencies. And the faculty, our small faculty and staff, knew and felt that they were a part of this, and I think this was an important part of our success.

Also, I can't say enough about the support that we had from the Administration, and I'd like to talk somewhat about Dr. Baird and some of the other people. Dean Baird—there's a little story about him in this report. Have you seen this one? He was a man of vision.

ASH: I'll see if the library has this.

SWAN: They probably do. I feel that he contributed more to the development of this medical school than any one other individual.

[Pause.]

ASH: We're looking at—it's a very nice photograph on the cover of this report to the alumni, University of Oregon Medical School, Spring 1968. Oh, here is an obituary?

SWAN: No, that was the time of his retirement, when he was succeeded by Dr. Charles Holman, one of my classmates, as Dean.

Dr. Baird became Dean in—full-time Dean—well, he wasn't full-time, he was part-time, but he became Dean in about 1943. And at that time, and right up to the end of the war, this institution was a small branch, really, of the University at Eugene, and representation to the Board of Higher Education, through quite a number of years thereafter, had to be through the University, as well as the budgetary system. And as I said earlier, there was a full-time faculty in the basic sciences, but the clinical faculty was essentially volunteer. The facilities were minimal. There was the hospital auditorium that Dr. Weeks had made possible; there was the Multnomah County Hospital; the old Outpatient Clinic; and the small Doernbecher.

At the time, we still had not made a close exchange of teaching services or research services with the Veterans Hospital. The Medical School of the University had provided the land for the Veterans Hospital, but they ran their clinical services on their own there. So it was truly a small institution with practically no research and very limited residency training program.

Dr. Baird had the vision, the organizational ability, and the persistence and the strength to carry it through and set the stage to make this a great university health science center. And like all progress, the wheel of progress turns against friction, and there was considerable opposition to some of his ideas, particularly bringing in full-time faculty and providing services to other than indigent patients, to increase the scope of patients for teaching and research. But he persevered, taking a step at a time. First came the new Administration Building, and I guess that was around 1950; then the first University Hospital, in which we played a key role with—or rather, Dr. Weeks did, in providing us with the overpass building for offices and clinics. And that was the beginning. Then moving Doernbecher to the top floor of the new University Hospital South there.

Then, with his driving force, the Veterans Hospital became available as part of our teaching organization. It was especially important in Ophthalmology because it doubled the number of patients, surgical patients, for whom we could provide training experiences for the residents and at the same time provide a higher level of service than they'd ever had at the Veterans Hospital. Our program, the ophthalmology program there, was different from most of the others in that our faculty provided all the supervision of the eye patient. There were no veterans hired, ophthalmologists, on the service at that time.

So Dr. Baird then, by establishing the facilities, the resources, and then developing a nucleus of full-time faculty while preserving the volunteer faculty and getting research started, made an enormous contribution the advancement of medicine in the Pacific Northwest. Few people could have overcome the immensity of what he did.

Now I should mention that also by his work with the Legislature, he was able to finally free—I shouldn't say free, but make it possible for the University of Oregon Medical School to become a free-standing institution on an equal standard with Oregon State and the University of Oregon before the Board of Higher Education.

I also would like to add that Dr. Baird had a remarkable ability to select capable people. There are two who particularly stand out. One was William Zimmerman, better known as Bill Zimmerman, who was his right-hand man and administrative assistant during the early developmental years. Another person who played a very important role in the background was Gwynn Brice, who later became Gwynn Dockery. She had the position now held by Tim Goldfarb. She was in charge of the Outpatient Clinic and getting the Hospital started.

Also, someone who I consider an equal to Dr. Baird, later, was Charles Holman. During those developmental years, Dr. Holman was the chief administrator, chief of staff of the Multnomah and Doernbecher Hospitals. So with the development of the University Hospital, he played a key role in its construction. We played—Ophthalmology played a role there, too, because our facilities were the major development on the tenth floor and the overpass building.

And just as an aside, I want to say one mistake we made. The first figures for construction came over, more money than we had, so we had to cut back someplace. And we cut out a bank of elevators, and paid dearly for that through the years with loss of time, people waiting to get on the elevators [laughs]. It was a high price to pay, which hasn't been entirely remedied yet; you still wait a lot at the University Hospital to take an elevator [laughs].

ASH: Could I ask you about Gwynn Brice? Because someone recommended that I interview her.

SWAN: Yes, you should. It's Gwynn Brice Dockery. Her husband was the first head of the—what's the name of the unit where they do the exercises?

ASH: Rehab or physiatry or physical therapy.

SWAN: Well, it wasn't physical therapy. It was a physical fitness center: the gym and the swimming pool and all that. He was the head of that. You'll find Gwynn Brice to be—Gwynn Dockery; I still call her Gwynn Brice—to be a delightful person. She'll be very modest about things, so you probably will have to probe, but her—about her own contributions, but they were very significant. She ran this Outpatient Clinic facility with a relatively small staff with great efficiency, keeping everybody happy and working together and motivated, which was important.

ASH: And she also worked with Dr. Baird.

SWAN: She worked with Dr. Baird and Dr. Holman. Those key people, really the four of them, Baird, Holman, Zimmerman, and Brice, which was her name at the time, were really the heart of the administrative organization there.

ASH: Now, during that time you were also expanding the residency program.

SWAN: Right.

ASH: You basically had started with no—

SWAN: The major activity—another major activity of the 1950s for me was to relieve the isolation of Northwest ophthalmology. We were on the frontier then, in the sense that they had nothing out here. Now we're on the frontier in advances, a different kind of frontier. But in between, a major step was to establish communications with Midwestern and Eastern and California institutions so we could get into the flow of the great advances that were taking place. And this meant—not having a big faculty to do this with, I carried most of the load, and that was accepting—to get guest speakers to come here, I had to go and be a guest speaker at other places, and that took time. And, then, I had to participate in the national education programs of the American Academy, and I served—my first major office was what is now the...

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

SWAN: [Laughing] Rolling on there.

Well, being a part of the Association for Research in Ophthalmology brought us into the forefront of exchanges with other institutions on research development, and I served as a trustee, and, finally, the national chairman, which was my first national office. It was important because it opened the door to participate in the development of the eye program in the National Institutes of Health when they formed, so that when the NIH extramural program was started in 1952, I was appointed the western representative for ophthalmology on the study section, which was called Sensory Diseases, which included ophthalmology, otolaryngology, speech and hearing, and other fields, like related sensory fields. I served two terms on that study section, which was eight years of going back and forth to Bethesda before jet transportation became what it is today [laughs]. Then, that door was opened, and, with it, being on the front line of what was happening in basic research related to our field. Then, when the ophthalmology research advanced and we had our own study section, I was the first chairman of that, and I served two terms there before moving on up into other councils.

But it was very important for this medical school for members of the faculty to be on NIH committees to get the flow of what was going to happen and be prepared for the new kinds of grants and things that were coming out. And for us, the research grants, which we've had continuously since 1952 in our department, the training grant was a very important part, and we were one of the first five departments of ophthalmology to have one, to train faculty and to train residents for academic careers. So that ran, I think, for twenty-one years and provided us with support for faculty, equipment, supplies, extra money so our residents could have fellowships at other institutions.

Among the people who benefited from those were Dr. Weleber, Dr. Rich, Dr. Fraunfelder of our present faculty. All went through that NIH-supported faculty development program. Then, also, Dr. Kalina, who became chairman at the University of Washington was also one of our NIH trainees, as was Dr. VanDyke, who set up the first department at Utah. And, of course, Dr. Harris, who went on, then, to become chairman at Minnesota. None of that would have been possible without the financial support of that training grant that we had down through the years.

Those were finally terminated because the faculties were developing across the country, and some of the institutions were abusing the grants. They were using grant money to pay for salaries of clinical people rather than for investigators, so they threw out the baby with the bath water when they discontinued those programs. It's been reestablished on a different basis, but primarily for training in the basic science field.

Well, that was on the research side, getting into the national picture. On the other side was the continuing part, and here the leading force as the American Academy of Ophthalmology. So Dr. Christensen and I volunteered and became early participants in their continuing education programs, and our department has continued to contribute regularly to those courses, continuing education courses.

ASH: Around the country?

SWAN: Around the country, and particularly at the national meetings. That, again, was important for us in establishing our national picture, which helps to bring in grant money, and also in the communication exchange. In those days there was no Internet. It was on the ground, person-to-person exchanges and working cooperatively in programs where the exchanges were.

On the educational side also was the American Board of Ophthalmology. The Northwest had never had a representative until I was appointed in nineteen—I believe in 1958. I served two terms, the latter two terms as chairman in '61 and '62, which, for the first time, gave the Northwest ophthalmologists a chance to have some input into the standards of practice in ophthalmology.

So, fitting into the national picture was detrimental to my home life, and actually I had to give up time here to do all that traveling, but looking back, it was essential. And Dr. Fraunfelder has continued along those lines. He's been very active in maintaining the national association. Whoever succeeds him will have to do the same, although our position is fairly well established.

ASH: Then, during this period also you were personally making some discoveries, and I wonder if you could say a few words about that and how that fit in.

SWAN: Well, unfortunately, raising money and developing faculty and participating in the national picture cut down my laboratory research dramatically, so whereas most of my early work had been done in pharmacology and developing drugs, new drugs and agents, I had to change. One of the directions that I changed, and areas that I could do when there was time available, was ophthalmic pathology.

I had the pleasure of working with Dr. Christensen on wound healing, and with Dr. Virginia Weimar on wound healing, and particularly in relation to reaction of the ocular tissues to injury. So this was multifaceted in that Dr. Weimar was a Ph.D. who was working at a cellular level, and she was one of the first to discover the growth factors in the ocular tissues. She didn't publish right away because she wanted to be certain of what she was developing, so she never got the full credit for her leadership in this field, but she was working at that level, and Dr. Christensen and I were working at the cellular level. Also, we were correlating that with the clinical picture.

So we established what at that time was considered a rather revolutionary approach, and some people questioned the ethics of it. As part of our eye bank program, we were getting people with disease processes to donate their eyes at death for study, and some of our critics thought that this was a bit morbid. But patients who contributed didn't feel that way at all, and now it has become widespread policy across the country, and we're continuing it here, yet, in relation to macular degeneration, Dr. Klein is. But we obtained over one hundred eyes of people who had had cataract surgery. We obtained their eyes postmortem,

with their permission, of course, and were able to establish the sequence of healing of the wounds in the outer coats of the eye, which differ from most other tissues, particularly because they're relatively avascular and highly specialized. There was a sequence of around fifteen papers all based on that, those studies on how the eye healed and the basis of complications and how they could be avoided by changing the surgical technique.

I was also able to continue my work in binocular vision with children, in particular, because that was something I could do, and I was very much interested in working with the children. Those were the major fields. But I had to give up the laboratory research and the organic—developing and synthesizing new drugs. There simply was not time for the concentrated effort that that required. That's too bad. We were—people who become chairmen of a growing department, time is split so many different ways that it's difficult to do any one thing like you could when you were just a regular faculty member. It's the price you pay. And, of course, your family is affected, too, because you're away so much.

ASH: I think you did a remarkable job of balancing everything.

I found this *Campus Forum* article from 1996 about the Discovery Awards and your mentor award, and it mentioned several of the things that you and I have talked about. I don't think we talked about the first ocular microscope for surgery. When did that—

SWAN: That started way back in 1947, when we were wanting to improve the techniques for operating on babies' eyes with congenital glaucoma, and also on cataracts. So Dr. Christensen and I—we were also working on tumors on the front segment of the eye. So Dr. Christensen and I rigged up a laboratory microscope and a lighting system, and presented that at the American Academy of Ophthalmology in 1948. Then, with support from the Elks providing the money, we had Bausch and Lomb Optical Company manufacture an operating microscope with a moveable stand and an arm and a lighting system that could be sterilized so it could be used in the main operating room. Then, a few years later the Zeiss company came out with a much more sophisticated model, which has been more or less the standard ever since, with remote control and many of the new advantages.

But that first microscope was financed by the Elks way back in 1949, which was years—we didn't publicize it, but when we presented the first paper in 1948, one of the people who discussed the papers said it was like gilding the lily [laughs], which it turned out to be far more than that. Some people thought it was just a gimmick, but it wasn't, and, of course, it extends through all fields in surgery now.

ASH: But it was something that you developed because there was a need for it in what you were doing?

SWAN: The main need was here.

ASH: They also mentioned your developing new treatments for childhood glaucoma and traumatic eye wounds. We just talked about the traumatic eye wound studies.

SWAN: Yes, the factor concerning healing. The treatment for congenital glaucoma actually had been—the basic treatment had been developed elsewhere by Dr. Barkan in San Francisco, but we developed the refined techniques, one of which was the design of an examination lens that could be put on the eye and you could see directly into the chamber of the eye through a microscope. It was an improvement over the previous lenses, a considerable improvement, and it's now more or less—it's still used, but it's been modified with the addition of a lighting system. Also, we developed an improved knife for making the incisions with less complication. Those were the major things. Also, the artificial tears, the methylcellulose, was used as a contact between what was called the gonial lens and the eye, which simplified and increased the visibility. So we contributed refinements to the technique rather than developed that basic technique itself. But it made it a simpler, safer, more predictable procedure. We also took the first movies through those lenses, too, and showed the action.

ASH: Wasn't photography one of the things that you were working on also?

SWAN: Yes. We had a team of young people in the early days here in the residency program, notably the late Dr. Flanagan from Coos Bay, who rigged up the first strobe light used for ophthalmic photography. It had to be fired by using a screwdriver with an insulated handle so it would short it across and fire. Those were the first strobe light photographs taken of the eye. Then, also, later Dr. Paul Bailey, a resident, played the major role in the development of taking movies of the blood vessels in the back of the eye, a system that was later used by the National Aeronautics and Space Administration to photograph the retinal vessels in astronauts preparing for flight.

So our photography department developed, also in the fifties, developing people who could take—specially trained to take ophthalmic photography; and now our present photography department under Pat Wallace and Mark Evans is certainly one of the outstanding departments in the world in that field. They take hundreds of thousands of photographs, as well as ultrasonography and developing new techniques in that field. But a whole team of people were involved in the creative part of this thing.

Again, this was part of our mission to bring new technology to the Northwest, so that we were the first to do fluorescein angiography in the territory. That was back, I think, in the early fifties.

ASH: So if I asked you what you were most proud of about your department, what would you tell me?

SWAN: Well, I've been asked that question before, and I think I can't give a single answer, but sort of categorize it. In the educational programs, I think the training of the residents to be the leading people in the area, plus the people like Dr. Fraunfelder and Dr. Harris and VanDyke and Kalina, who went on to develop departments of ophthalmology in other medical schools. I feel very good about that. And, of course, Dr. Fraunfelder should be on that list, too, because he developed the department at Arkansas, before coming in at Oregon.

ASH: It says in this article that six of your residents became chairmen of ophthalmology departments at medical schools.

SWAN: That's right.

ASH: That's still pretty accurate?

SWAN: That's true. There's more to it than that. There are some who are—have contributed a great deal but haven't been chairmen, and I can think of two right off. One is Dr. Larry Rich, who's certainly one of the top people in the country in corneal diseases and refractive surgery. Another one is Richard Weleber here on our faculty, who also is one of the top people in the world in ocular genetics. Very distinguished people, and, of course, Dr. Christensen never became a department chairman, but certainly contributed significantly and became a member of the American Board of Ophthalmology. I don't want to cut out these people because they've all contributed so much to the development of our department as well as departments elsewhere.

That's on the teaching side. On the research side, I think of two areas there. One is the research training, training other people to go on and be major investigators and contributors in our department; and also, then, the research itself. I think perhaps the most significant thing was the drug synthesis, developing the substitutes for—developing the cholinergic blocking agents, because that was a new concept. Developing the concept of inhibitory analogs of drugs, which is now widely accepted, which wasn't back in the 1940s when we first developed the concept. They thought we were crazy, working along that line. But it proved to be of basic importance in general pharmacology, as well as in our field.

As far as patient service is concerned, the Elks program has been a wonderfully satisfying feeling, particularly with the—as just has happened in this last week, in a grocery store with my wife, having a man come up and say, “You're Dr. Swan. You took care of me in the Elks clinic when I was a little boy. I'll always remember.” That sort of thing gives you a wonderful feeling, particularly if you happen to be a little low that day, and to have somebody come up like that, it makes the day—

ASH: I would think so.

SWAN: To know that you've helped somebody else.

ASH: You probably can't even estimate how many patients you've treated in your life.

SWAN: [Laughing] I have no idea. I actually never think about it.

In terms of public service, getting the blind commission started and seeing it develop into a statewide program. Then, of course, the big thing is the development of the department and its role in the development of the Medical School into a great health sciences

university. Ophthalmology, Dr. Fraunfelder and I feel, we have been an important spoke in the wheel of the University development, beginning with—I don't mean to imply that we alone, because certainly Dr. Weeks got things started when he made possible the Library and Auditorium, but a whole series of ophthalmologists in the department have contributed significantly. And, of course, what you've been waiting for me to say, the Casey Eye Institute.

ASH: How did you know, how did you know? [Laughter] Tell me the story.

SWAN: That is certainly the crowning achievement so far, but I think there's more ahead. I think when we get the expansion of the—more research on the parking building, because we're overcrowded already. And I foresee more and more developments in this field scientifically.

ASH: But how did the Casey concept begin?

SWAN: All right. That's a story unto itself.

First, looking back on the history of our department, we've constantly been outgrowing our facilities as we've gone along. We started with those meager little rooms; we needed research space and got laboratory space loaned to us; and, then, expansion onto the fourth floor of the Outpatient Clinic to get the children's eye clinic; then extension into the basement of the Administration Building temporarily; and, then, working with Dr. Weeks and Mrs. Weeks and Dean Baird to get the overpass building and the space in the tenth floor of the Hospital; then, when we outgrew that, working with the Elks to raise the money to build the extension across the roof.

And, then, when Dr. Fraunfelder succeeded me in 1978—and I do want to talk about his role sometime, because he's made wonderful contributions—but when Dr. Fraunfelder succeeded me in 1978, he introduced an extended phase of our program, and that is the phase of subspecialization. We already had subspecialized in pediatric ophthalmology. We had begun with a specialty in retinal diseases, but he foresaw, correctly, the need to train subspecialists in other fields: corneal disease, vitreal disease of retina, oculoplastic surgery, those fields. So that would not be possible without more space. Initially, we considered expansion, completing an expansion on the tenth floor, but it soon became evident that that was not going to be adequate.

Dr. Fraunfelder had a very good working relationship with David Weeks, the president of Research to Prevent Blindness, and we had already had established a working relationship before he came. But Research to Prevent Blindness was looking for a seventh regional research institute, to be located in the Pacific Northwest. The choice was between the University of Utah at Salt Lake City; Seattle; Vancouver, British Columbia, the University of British Columbia; or Oregon. Oregon was selected, and Dr. Fraunfelder deserves a lot of credit for that. So the planning began, really, around the early 1980s. Then there were several years of working with the Administration, with President Laster, to get the

approval to get accepted, and also to get an agreement set up between the Research to Prevent Blindness and the University.

ASH: Was there funding that came with that?

SWAN: Funding came with that, and that was in—1984 was when an agreement was signed. I believe it was '84. That agreement was that the Research to Prevent Blindness would provide the funding for a feasibility study, hiring an outside consultative agency, and also would contribute to the financing of the capital fund campaign. So that began in 1984-85. Now, there was also a good deal more involved. It was a matter of our faculty working out the needs of the territory, trying to see far ahead. And, here again, Dr. Fraunfelder played the leading role in making contact with people around the region. And always along the way over the years we've always studied and kept an analysis of the needs of ophthalmologists throughout the territory, so this provided a background.

I'd like to talk to you about this as a separate subject and get my dates and times together.

ASH: All right.

Well, let's see. You said you wanted to come back to Dr. Fraunfelder, but we've been talking about him.

SWAN: I'd like to come back so I can do justice to what he has contributed and to bring it up to date. But I wanted also to talk more about what happened to the department right up to that time, into the seventies.

The sixties and seventies were really when our department came into national recognition by our contributions to the national societies and by the training of our people. We introduced at that time the photography laboratories. The research laboratories were the third floor of the research building, and there we had some outstanding people. I mentioned one, Virginia Weimar, who was a leader in—it really was the beginning of molecular biology, and she was one of the leaders in that field. We also had Dr. Robert P. Burns, who made a major contribution to the development of the department, and I'd like to tell you a little bit about him.

Dr. Burns was a graduate of this medical school and was number one in his class, and had also done some work in our department as a medical student research assistant. After he completed his internship, we had a considerable heart-to-heart discussion with him, with Dr. Christensen, and we felt that he would be qualified to get an outstanding residency at one of the Eastern institutions, and that, in view of the fact that all of his education was here, he should go elsewhere for the training, with the thought of coming back.

So he took the three-year residency at the Institute of Ophthalmology at Columbia and was an outstanding resident, from what their faculty told me. While he was there, he

continued to do research, and, along with Dr. Christensen out here, he was interested in microbiology and the cornea. You'll have to forgive me for a second. [Pause.]

He described—now I'm back on track. Dr. Christensen was the first to describe cytomegalic disease in the human eye in a pathology specimen, and Dr. Burns was the first to recognize that and demonstrate it in two patients while he was a resident, and published the first photograph—actually, they're artist's drawings of the lesions of cytomegalic disease. At that time it was considered a rarity. With the advent of AIDS...

[End Tape 3, Side 2/Begin Tape 4, Side 1]

ASH: Side one.

SWAN: Well, after his residency, Dr. Burns was appointed to the faculty at Columbia, where he continued to contribute.

In the meantime, things were happening out here at Oregon. Dr. John Harris, another major contributor to the early development of our department, joined us as a research assistant when he completed his medical degree here. Then he had an internship year in the Army and returned to our residency program as part of the beginning of the NIH program. So Dr. Harris made significant contributions to the understanding of the flow of fluids in the eye and was the recipient of the Friedenwald Medal, one of the most distinguished medals in ophthalmology for a younger person. He also was the first graduate of this medical school to receive a Markle Scholarship in Medicine. Now, the Markle Scholarship in Medicine was not just ophthalmology, but all fields, and it was an award that was given, a cash award, to the recipient for a period of years so they could continue to develop as potential faculty members.

Well, in 1957-58, I guess it was, the University of Minnesota hired Dr. Harris away from us, and he became professor and chairman of that department and developed it into an outstanding research-oriented department. Later, Dr. Harris served on the NIH committees, served three terms, one of the few people to ever serve three terms on the national advisory councils. He served one term on neurological diseases and blindness and two terms on the National Eye Institute.

He retired a few years ago and just passed away in 1996. But what he brought to the department was a basic—understanding and training in basic sciences, particularly biochemistry. And while he was here he established a close working relationship between our department and, particularly, Biochemistry, but the other basic science departments. So without his contributions, we would never have been able to get the NIH support that we obtained.

Well, Dr. Burns effectively—when Dr. Harris moved to Minnesota, we were able to bring Dr. Burns back here, and Dr. Burns continued on our faculty until 1978. Dr. Christensen, in the meantime, had started the eye bank, the first one in the Northwest. In fact, they didn't even call them eye banks at that time; it was a corneal transplant service.

Dr. Burns took over and further developed that field, and developed the subspecialty of corneal diseases and external diseases here and became nationally known for his contributions in that field. He established our microbiology laboratory, for one thing.

Then he moved on to become a member of the American Board of Ophthalmology, as Dr. Christensen had done, and, actually, in his last two years he was chairman. So we were maintaining a constant sequence of representation on that board, and he carried it on and was later succeeded by Dr. Fraunfelder and Dr. Kalina. So the sequence—and now that sequence continues, because Dr. Tom Shults, who is our neuro-ophthalmologist, is now serving on the American Board of Ophthalmology. So that's a sequence that very few other institutions have had. Of course, those men all did it on their own. They were all outstanding, and Dr. Shults is outstanding now in his field of neuro-ophthalmology.

Well, that got us into the sixties and seventies, and by that time, you see, it was no longer a one-man department, by a long ways. There were a number of these distinguished people: Harris, Burns, Christensen, among others, Weimar in the laboratory, Lynette Feeney in the laboratory; some truly outstanding people. So the stage was set for Dr. Fraunfelder when he came in '78. I had served thirty-four years, which was perhaps too long, but I'm glad I served until he was able to come back and take over.

ASH: When you left, how many residents were there in the residency program?

SWAN: We had twelve then, and, then, when Dr. Fraunfelder came, they were combined with the program at Good Samaritan, but that was more than—it became too many to meet the year-by-year needs, because the University of Washington, the University of British Columbia, and the University of Utah were all turning out residents. So we filled the urgent need for ophthalmologists in the Northwest in the '50s and '60s, but the need—when Dr. Fraunfelder came, no longer was there an urgent need for ophthalmologists, but the need was for subspecialists in the field, and that's where he took the next stage of development of the department.

Okay. Can we quit for today?

ASH: I think it's about time.

[End of Interview]

INDEX

A

American Academy of Ophthalmology, 46, 47
American Board of Ophthalmology, 46
Association for Research in Ophthalmology, 45

B

Babson, S. Gorham, 36
Bailey, Paul F., 48
Baird, David W.E., 15-17, 19, 20, 22, 23, 24, 25,
30-32, 34, 35, 42-43, 44
Barkan, Otto B., 48
Breinin, Goodwin M., 40
Brookhart, John, 35, 36
Burns, Robert P., 40, 51-52, 53

C

Casey Eye Institute, 50
Christensen, Leonard, 25, 26, 40, 46, 47, 49, 51, 53
Couch, Ralf, 15, 20

D

Damon, James W., 39
Dept. of Ophthalmology, 15, 17, 22, 33, 40-41,
43, 50
facilities, 20, 24, 25-26, 33, 37, 38-39, 43-44, 50
faculty, 18, 25, 26-27, 39-40, 45
funding, 18, 25-26, 27, 28-30, 31, 38-39, 45, 51
image, 38, 51
graduate programs, 24-25, 31-32, 44, 46, 53
mission, 23-25, 27-28, 41
research, 26, 27, 28, 40-41, 45, 46-48, 52-53
Dept. of Pharmacology, 8
Depression, Great, 1-2, 3-4
Dillehunt, Richard, 2, 22
Dockery, Gwynn Brice, 43, 44
Dockery, W.C. (Bud), 44
Doernbecher Memorial Hospital for Children,
16, 29, 36

E

education, medical, 4, 5, 7-8
Elks Children's Eye Clinic, 20, 38-39, 40, 49
Evans, Mark, 48

F

Feeney, M. Lynette, 53
fees for service, 17, 18-19, 32, 34-35
Flanagan, Roger R., 28, 48
Fraunfelder, Frederick T. (Fritz), 28, 40, 45, 46, 49,
50-51, 53

G

Goldfarb, Timothy M., 43
Good Samaritan Hospital, 32, 34

H

Hallam, Bertha, 22
Harris, John E., 26-27, 45, 49, 52-53
Holman, Charles, 4, 5, 6, 42, 43, 44
Hoyt, Charles, 29

J

John and Mary Markle Foundation, 11, 52
Joyce, Thomas, 18

K

Kalina, Robert E., 45, 49, 53
Kiehle, Frederick Andrews, 15
Kistner, Frank B., 18
Klein, Michael L., 47
Knapp, Philip, 40
Knowles, Josephine, 30
Koch, Robert, 21

L

Larsell, Olof, 6, 26
Laster, Leonard, 51
Lewis, Howard (Hod), 6, 31, 35

M

Mason, Howard S., 27
Medical School Hospital, 32-34
McCallum, George C., 28
Middleton, William Shainline, 5-6, 7
Multnomah County Hospital,
patients, 16, 19
Myers, Harold Bunce, 2, 5, 6, 7, 8, 9

INDEX

N

National Eye Institute, 36
National Institutes of Health (NIH), 35, 45
Northrup, Jane D., 5

O

O'Brien, Cecil Starling, 7-8, 10, 11, 12, 16, 17
ophthalmology, 7, 12-14, 40, 47-48
Oregon Commission for the Blind, 25-26, 41-42
Oregon School for the Blind, 39, 50
Oregon State Elks Association, 19-20, 37, 38-39, 47, 49
Oregon State Legislature, 32, 41, 43
Oregon State System of Higher Education (OSSHE), 32, 42, 43
Osgood, Edwin, 3-4, 8, 18

P

Paquet, Joseph, 23, 34
Pasteur, Louis, 21
pharmacology, 12-14
Poor, Clarence, 6
Portland Clinic, 30

R

Research to Prevent Blindness, 51
Rich, Larry F., 45, 49
Robertson, Joseph E., 41

S

St. Vincent Hospital, 23, 34
Selling, Laurence, 6, 8-9, 18
Shannon, James A., 35
Shriners Hospital, 29
Shults, W. Thomas, 53
Stearns, Howard, 18
Swan, Kenneth C.,
 biographical information, 2, 10-11
 career, 11, 15, 17, 32, 35, 36, 44-45, 46, 47, 48-50, 53
 education, 1-5, 6, 8-10, 15
 internship, 5-7
 research, 2, 3-4, 7, 8-9, 11, 12-14, 15, 46-48, 49
 residency, 7-8, 10-11

T

Talbot, Thomas E., 25, 26
Taylor, Edgar Merle, 7, 26
technology, medical, 28, 47, 48
Turner, Vernon C., 6

U

University of Iowa, 7-8, 16
University of Oregon, 32
University of Oregon Medical School,
 administration, 15-17, 30-31, 32, 42-43
 buildings, 1, 22, 24, 32-33, 42, 43-44
 curriculum, 3
 faculty, full-time, 15, 18, 31, 34-35, 42
 faculty, volunteer, 4, 6, 17-18, 26, 30, 42
 funding, 9, 17, 18-19, 22, 29, 32-33, 45
 image, 38
 postgraduate education, 30, 31-32
 research, 3-4, 8-9, 35-36, 42, 45
 student employment, 4
 town-gown relationships, 32, 34, 43
University of Oregon Medical School Library, 1-2, 21-22
University of Wisconsin, 5-6, 7

V

VanDyke, Henry, 45, 49
Veterans Administration Hospital, 16, 38, 42-43

W

W.K. Kellogg Foundation, 25-26
Wallace, Patrick, 48
Watzek, Aubrey R., 28
Weeks, David F., 51
Weeks, John E., 1-2, 21-24, 26, 33-34, 38, 50
Weimar, Virginia L., 46, 51, 53
Weleber, Richard G., 41, 45, 49
West, E. S. (Edward Staunton), 6, 24, 26, 27
White, Norman, 13
Wolff, Stewart MacKay, 40
women, as students, 4-5
World War II, 11, 14

Z

Zimmerman, William, 43, 44