Title
“OSU Pharmacy in an Era of Change”

Date
August 5, 2014

Location
Block residence, Corvallis, Oregon.

Summary
In the interview, Block discusses his family background and upbringing in Yakima, Washington and his undergraduate experience as a pharmacy student at Washington State University. From there he describes his time as a doctoral candidate at the University of Wisconsin and the differences that he observed between Wisconsin and WSU.

The bulk of the session focuses on Block's thirty-seven years as a member of the OSU Pharmacy faculty. In discussing his career, Block comments on his initial impressions of the school, changes in the organization of the Pharmacy College, and the evolution of the Pharmacy teaching curriculum. He also recounts his memories of campus culture with a particular focus on the tenure process and the influence of President Robert MacVicar.

Block likewise reflects on colleagues that were important to him and to the College of Pharmacy, recalls his sabbatical experience working at Stanford with Carl Djerassi, notes the emphasis placed on communication skills for OSU Pharmacy students, and describes his work with the National Science Foundation Panel for Instructional Scientific Equipment. In addition, Block recalls the creation of a satellite Pharmacy campus in Portland and the increasingly close ties between OSU and OHSU that ensued, and remarks on the shift in OSU's program away from a B.S. in favor of a Pharm.D.

The interview also includes discussion of Block's professional work off of the OSU campus, including his eight years with the Oregon Board of Pharmacy and the board's role in interpreting and implementing Oregon's assisted suicide law. He also notes his work with the National Association of Boards of Pharmacy's Foreign Pharmacy Graduate Equivalency Committee, his interest in the theory of general anesthesia, and his volunteer duties as a certified Medicare resource. The session concludes with Block's reflections on change and growth at OSU.

Interviewee
John Block

Interviewer
Chris Petersen

Website
http://scarc.library.oregonstate.edu/oh150/block/
Chris Petersen: Okay Dr. Block, if you could please introduce yourself with your name and today's date, and our location?

John Block: My name John Block. Today's date is August 5th, 2014, and we are in the family room of my house.

CP: And we're going to talk a bit about your career in pharmacy, and your association with OSU. And I want to start off at the beginning. You were born in Yakima, Washington?

JB: That is correct.

CP: Is that where you were raised?

JB: Yes, all the way through high school, and then Washington State University for a bachelor's degree and a master's, and the University of Wisconsin in Madison for my doctorate.

CP: What were your parents' backgrounds?

JB: You mean business-wise, education-wise, what?

CP: Just to give us a sense of you?

JB: Okay, well my mother was born and raised in Yakima. And it's a funny story. Her parents were probably the last group of pioneers. They are actually listed in the Yakima Valley Historical Museum on some wall plaque. They actually came out in a pioneer train. They weren't on a wagon train. But so she was raised there and born on a farm. I think my granddad was a foreman, or something like that. It was not his farm. And the interesting thing was her birth was never registered, because she was a girl baby born out on a farm, and it was not pertinent. Later on, after she was married to my dad, who I'll mention in just a moment, they got a court order, so hers is a court-ordered birth certificate, which then paid off when Medicare came along, because she could prove her age.

My dad was raised in Buffalo, New York, and in those days there was not State University of New York, per se. The State of New York supported different majors at private schools, I think Forestry was at Syracuse, Engineering was at Cornell, things like that. And he was a twin, and second-born. He had an older brother, and his dad being German, said the oldest son was the one who was going to get to go to college. So my dad took commercial courses, and then his senior year in high school, his dad, my granddad, told him, well, there wasn't enough money for him to go to college.

Well, as my dad sort of said, he didn't take the college credit courses so he was not eligible for any New York school, so he went to the University of Pennsylvania, graduated from the Wharton School of Business Administration, as my dad said, before Harvard stole the faculty. Hired onto the Firestone Tire and Rubber Company, and Harvey Firestone, Junior, was in his training class. And then, as he looked for a position to be a Firestone Tire salesman, he found that the eastern Washington, or actually the central Washington district, had done very poorly. And he had been advised, don't replace a retiring salesman who was real successful [laughs], because you'll go down. Go to one who was not successful, and you will go up. And he was, he was successful.

And he, basically I think, was headquartered in Yakima, but his territory took him all through eastern Washington and these small wheat towns, Kahlotus, Washtucna, I guess over to Colfax, maybe up to Spokane then; I'm not sure. And my mother—I guess they were going to a baseball game somewhere—and got married. Drove a Model A Ford for their wedding trip back to Buffalo, which is where he was then going to work. He had resigned from Firestone. And they had gone, I guess, into Canada, crossing through Detroit-Windsor, then into Canada, then across the Peace Bridge into Buffalo. And the immigration customs guy on the U.S. side, of course, asked who they were, where they were born. My dad said he was born in Buffalo, fine. My mother was very naïve, and she said she was born in Yakima. And he asked her what part of Japan was that? [Laughs] And she didn't have a birth certificate, as I had indicated. Well, then, so she got in, obviously.
The Depression struck. And what people didn't realize was that the Depression was roughest in the industrial parts of the United States, because the manufacturing stopped. The people were all laid off. In the rural areas I think weren't great, but people ate, and they bartered. So my dad decided we were going to head back out to the State of Washington. And he had business contacts who could help him get established. And so that's how we got back west, left Buffalo and going to Yakima. Basically built up an independent fuel oil and gasoline distribution business [0:05:01], fuel oil before natural gas had come in.

CP: Did you have any siblings?

JB: Had. My brother died a couple of years ago. He was eight years older than me, and as I say, he died a couple of years ago. He graduated from Washington State also, ROTC, back in the days of the Korean War, of course there was a draft, and stayed in the military, got to be a bird Colonel, and so actually I attended and participated in his internment in Arlington, with the full caisson band, the whole ceremony.

CP: What were your interests growing up as a boy in Yakima?

JB: Well, that's interesting. I guess I dabbled around in photography. I had a dark room, and I'd shoot pictures. I had an old Argosy-3 35 millimeter camera, graduated from a Brownie, Kodak Brownie. And I would develop my pictures. I never did do color. I did family photo Christmas cards. Took some of the pictures around the church I grew up in, and got on the—got on the stage crew at Yakima—in those days it was Yakima Senior High School. It was the only high school in town, in those days.

And it was also the civic auditorium. It had a beautiful, a nice auditorium, full stage, dressing rooms in the basement. And we would be—the stage crew, if we worked for somebody putting a show on, we would get paid. So I got my responsible position, and I even got a key to the stage area, and learned how to get along with the janitors. So I was on the stage crew when the Air Force Band came through, and there was a stage circus with a little baby elephant in the basement. That upset the janitor, because he made a mess. [Laughs] And of course, there were the plays and things like that that were put on.

CP: How about your earliest interest in science and pharmacy?

JB: I guess it was just the science courses that we had to take for curriculum in those days. It was pretty regimented.

CP: In high school?

JB: Well, even, I come out of the era of junior high, so grade school went through 6th grade, junior high was 7th through 9th, and high school was 10th, 11th and 12th grades. And I had very good science teachers. They all had master's degrees, pretty much in their—in their subject matter, as opposed to a masters in teaching. And I guess that was how I got my interest. I didn't pick pharmacy right away. I was an undeclared major at Washington State, and wandered around, and went to the counseling center, and sort of looked at that. And I thought, I kind of had the pre-pharmacy curriculum. It's what I was doing. And it was one where I didn't think I would be stuck in a lab; I would know the public. Well I ended up in a lab anyway. [Laughs] Off to grad school and academia.

CP: Well, tell me about your experience at Washington State as an undergrad and a budding pharmacist.

JB: Well, we lived in—there were two political parties in those days. There were the Greeks and the independents. And there was none of this that freshmen lived in the dorms their first year. If you pledged, you went to your Greek house immediately. The person who was in charge of the dorms believed in a strong dorm system, and loyalty and so forth, so if you went Greek, by golly, you went to your fraternity or your sorority, for the women. And of course, there was no such thing as co-ed dorms. The boys, the young men, were on one side of the campus, and the girls on the other side of the campus, and you if you didn't get the girl in on a certain time, and she got "campus-ed," then you had to give her a dozen roses, which happened to me once.

And the dorm I was in was nice. There were suites of rooms; they had wash basins in the rooms. There weren't the long hallways. I won't call it semi-private, but they were nice little—and they were quiet. They had real thick walls between the rooms, plaster on lathe. So it was good. [0:10:00] We had a good reputation. We got one of the higher grade point
averages. There was this type of competition, and intramural, which I didn't participate in. My worst sport in school was PE. [Laughs] Just as an aside, you'll never guess who my—one of my two physical education teachers in high school were: Bobo Brayton. Before he went off to Washington State to be the famous baseball coach, he was a high school PE teacher.

**CP:** Wow. What was the curriculum like for you in pharmacy as an undergrad? I assume it was somewhat different from what students—?

**JB:** Yeah. It was—well, we had compounding, and had a lot more lab involved. And so I said, we'd compounded ointments, and creams, and suspensions, elixirs, and all that type of stuff. Otherwise, medicinal chemistry was medicinal chemistry, based on what was known in those days. Pharmacology was pharmacology. Pharmaceutics was pharmaceutics. It's just, there wasn't as much known. The concept of receptor was just that, a receptor. One had never been isolated. Drug design was in its infancy, just basically a group of compounds and just the companies would screen them, and if they got a hit, they got a hit. The Kefauver amendments had not yet passed, so you had the thalidomide situation occurred. I'm trying to remember when the efficacy requirements went in, and they screened all of the over-the-counter drugs, and reformulated a lot of them, because the brands were popular, but they had to take ingredients out because they couldn't prove they were effective.

So, I would say that science and efficacy requirements have greatly increased over the years. And now, they are of course into all of the—reevaluating the types of statistics that are used, and how much are the companies—and I don't mean this as an anti-company thing at all, because I'm sure some of the same stuff went on in the lab, in the university labs too. I'm just looking at the number of papers that are being retracted nowadays, coming out of university labs, and institutes, and so forth. But when you throw out a bad study, when in reality the study was probably a very important study [laughs], that said something you'd better be alert to. So I would say there's a lot more in this day and age of electronic and communication, and so forth. In many ways, the public may be better protected.

**CP:** By the time that you had finished at Washington State, it was pretty clear that you were going to be a pharmacist, it seems. What about it appealed to you? What sparked your interest, I suppose, for pursuing a career in pharmacy?

**JB:** Well, I knew I could not do medicine, because you notice I'm holding my hands here and there's a slight tremor. I have what's called familial idiopathic tremor, inherited from my grandmother, through my mother, through me. And at least in medical schools in those days, there was a required surgical rotation, and you would not want me to be your surgeon. In fact, in physiology, we had to do surgeries on rabbits, and we all had to take turns. And I didn't do too well on my rabbit. Fortunately, I had three other people on my team that could bail me out, but I was one of those kids in grade school when testing and measurement came along in first grade, I couldn't get my bow tied on my shoe. [Laughs] I'm real clutzy with my hands. [Laughs]

So you didn't want me in medicine, at all, or dentistry, or anything like that. But I can count, pour, lick and stick. [Laughs] I mean, which is course—and convey knowledge to the customer or the client. But the fellow who later became dean of Washington State looked at my record, and said basically, "I think you ought to consider graduate school." So that was just a faculty member took an interest.

**CP:** So you had a mentor?

**JB:** Put me off in that direction.

**CP:** You had a mentor of sorts in that time?

**JB:** Oh, definitely, definitely.

**CP:** Well, you went to Wisconsin briefly after Washington State?

**JB:** Well, I was there for four years.

**CP:** Right, but did you do some post-grad work at Wisconsin right after you finished your bachelor's degree? Am I right about that?
JB: After my bachelor's degree, and I stayed at Washington State to get my master's.

CP: Okay.

JB: [0:15:00] And then went to Wisconsin, and I was there for four years, typical period of time to get a doctorate, at least in the chemical, like, pharmacy sciences. Came here. So I graduated in, basically, 1966.

CP: Tell me about your graduate training at Washington State, and then at Wisconsin.

JB: Washington State was a traditional—I mean, for the master's, was a traditional medicinal chemistry. Had a research problem, make a series of compounds, and I wasn't there for them to be tested, but that was basically it. And of course, you take the appropriate chemistry courses with it. In fact, most of the courses were in chemistry, except for an advanced course in drug design. At Wisconsin—did you want me to jump to Wisconsin?

CP: Yeah, whenever you're ready.

JB: Okay. At Wisconsin, again, they didn't have a—it was interesting. They didn't—I was originally going to work for a different chemist, and he moved on to Kansas. And I, as I say, ended up at Wisconsin. And that's an interesting story, okay. You know, I hope you have a lot of inches on your—I guess it's no longer inches on a tape; it's a silicon chip.

CP: Ones and zeroes.

JB: [Laughs] Right. I applied to three different graduate schools, or I wrote to three different graduate schools, and I applied to two, if I remember right. I told you, the person I was interested in had moved to the University of Kansas at Lawrence. But they sent me old, outdated catalogues, so I just shrugged it off. There were a couple of new faculty members at Washington State who were both Wisconsin grads, so I was sort of getting input from them at the same time, and they knew the personalities at Wisconsin.

I applied to the University of California at San Francisco, which is where the pharmacy—that's the medical center of the University of Cal, the original medical center for the University of California system. They have more than one of them now. And applied there, and was accepted with a teaching assistanceship. I got accepted at the University of Wisconsin with a research assistanceship. And these two fellows, young faculty, assistant professors, said, "Grab the research assistanceship. You could start right out on your research, speed things along." So I did.

And it was very interesting. In late spring I got a letter from the University of California, San Francisco, saying they would award me a Smith, Klein and French fellowship. I think probably I was a runner up, and whoever they originally gave it to turned it down and went somewhere else. But by that time I had made my choice, and it didn't seem right to back down, particularly when I'd accepted. And it would have actually been unethical for California to have accepted me then. I don't think they would have cared, but. [Laughs] But it turned out well. I got my doctorate; I met my wife. This December would be our 50th wedding anniversary. So it worked out well at Wisconsin.

CP: Tell me about the environment there, how it was different from Washington State.

JB: Oh! [laughs] Wisconsin was definitely a research university. It was definitely publish or perish for the faculty. The undergrad, as the former dean told me on my exit interview, he said, "You want to understand the role of the undergraduate. They provide the tuition and support so that you faculty can do your research, so treat them nicely." [Laughs] I mean, there was no ifs, ands, or buts about it.

You've got to keep in mind, Wisconsin had a longer tradition than a lot of the Big Ten schools, because they had the Wisconsin Alumni Research Foundation. So when you drink your glass of milk with Vitamin D in it, the royalties from that patent had gone to the University of Wisconsin. If you are using Warfarin as an anticoagulant or a rat poison, the "Warf" is Wisconsin Alumni Research Foundation. That was all discovered at Wisconsin. And on it goes.

So they were into the business full-time, make no mistake about it. And a lot of us sort of had a reaction too, like, do we want to be assistant professors in this type of environment? So when the opportunity came to come to Oregon State, it seemed nice, attractive, because there was more emphasis on the teaching. [0:20:00]
CP: Well, before we get to OSU, I'm interested a little bit more in your research as a graduate student, and how that progressed.

JB: Well, it went well. It got publications. [Laughs] It was a different type of problem; it was not a drug design problem. My major professor was actually into natural products, and he was very successful at it. But he had what was called a physical organic problem. He made his claim to fame by, actually, I think, finding an error in a structure that the late R.B. Woodward had developed that was just, the only error was in the stereochemistry. But anyway, so he wanted to follow up on that, and so basically that was my problem.

So I did not have to pick natural products, isolate, and hope I got everything done with the ten milligrams I could get out of the plant. I could just keep making my simple little compound, and keep running tests on it, and so forth. So it was that type of problem. And but otherwise, it was a standard graduate, university graduate chemistry lab—lab benches, everybody in there working, post-docs and graduate students.

CP: Well, you came to OSU in 1966. Tell me a bit about the decision to move back to Oregon.

JB: It was mainly jobs were kind of tight, academic jobs. I had a chance to interview at the Chemical Abstract Service, that's the American Chemical Society is the parent of it, in Columbus, Ohio. And I could tell that was all going to get computerized at some point, and I thought that would be a good mix, and I think I would have done well. But this other position came along, and I talked with my major professor and decided to take it. So it turned out that there was an opening also at the University of Nebraska, which I guess I really wasn't that aware of. But a person I later knew, and he and I became co-authors on the first textbook I was involved with, and he said, oh, yeah, he knew about the—I'm not sure where he got is PhD, but he knew about the Oregon position, and later heard it got filled. He didn't realize it was me until later; we met and were comparing notes.

And I'm glad I took Oregon, because things have not gone well for pharmacy in Nebraska. They were in Lincoln, then they got moved to the medical center in Omaha, and the provost that moved them was all very pro, then Nebraska started to have financial problems. There were two pharmacy schools in Omaha, and the governor said, "You know, we only need one. Why don't we let Creighton be it?" I don't know what he was so against having one at a state school, but anyway. So they had budgets cut. They did save the school, but when budget cuts like that happen and faculty, good faculty, aren't going to go there, and some leave. That would not have been a good situation. This has been a growth situation, and the pharmacy school here has grown professionally, and enrollment, too, but professionally.

CP: What were your initial impressions of the university and of Corvallis?

JB: Well, Corvallis was a nice, beautiful college town, I should say, even in those days. I mean, it's—and I like the fact that I could even bicycle. I had a bicycle from Wisconsin. The interview was weird, I have to say, because my colleagues at Madison were going for their various interviews, and were talking about these research presentations they had to give, and all of this. And I come out here and [laughs] there was no affirmative action, none of that type of stuff. I was hired in the back seat of the dean's car. [Laughs] At the Townhouse Motel. [Laughs] After 24 hours of interview. [Laughs]

So anyway, things were—I thought, "Well, this is good. I like this." So I had a job. And my wife was very flexible, and she had gone to school out of state, and so forth, as far as her bachelors, and travelled quite a bit. So she was fine. And she's enjoyed this town too, very, very much so. Climate-wise, it's superior to the winters, Wisconsin, and then you have the hot, muggy summers with the mosquitoes in Wisconsin. [0:25:00] So, no, this is a very pleasant place to live.

CP: Yeah. How would you characterize the department upon your arrival?

JB: Very heavy teaching orientation—oriented, and very, very structured. It was a small faculty. In those days I believe it was a School of Pharmacy, and then I think under President MacVicar, it got to be Oregon—it was already Oregon State University. It was not Oregon State College. By the time I got here, it was already Oregon State University. And some of the academic units were colleges, and some were still schools. And he finally said, "Look, if—," I guess he told the deans, I guess—I mean, I wasn't—that, "If you want to be a college, you can be a college." So I guess we changed our letterhead. [Laughs] We became a college.
And that meant we had departments. But there weren't that many—Medicinal Chemistry had a department head and two faculty. Pharmaceutics had a department head and three faculty. Pharmacology had a department head and two faculty. It was crazy. And I think there was a Department of Pharmacognosy, which is the old term for natural products, and I think they had two faculty. And so, the dean didn't have faculty meetings—this was Charlie Wilson—he had department head meetings. And so these four sort of senior guys [laughs] sort of ran the school, and the rest of us sort of picked up by osmosis what the heck was going on. [Laughs] Then we'd have a faculty meeting every once in a while. So.

**CP:** Was there any sense of the history of the program? It had been around since 1898.

**JB:** No, and in your research, whatever you could find—and I don't mean this negatively, but there was a former dean; name was Crossen. And he committed suicide. And actually I had a graduate student who was an undergraduate here at the time it occurred. I don't to this day know exactly what the situation. Obviously, the man had depression of some type. And there was some story that he had run up gambling debts, and so forth. But I honestly don't know the truth.

To his credit, he was a Minnesota grad, as I understand it, and he brought one of the first Rho Chi—Rho Chi is the national pharmacy honor society—to Oregon State. I don't remember what chapter we are, but we're one of the early chapters.

**CP:** Is it the Phi Delta Chi?

**JB:** No, no. Phi Delta Chi is a pharmacy fraternity, co-ed. There is another one called Kappa Psi that I was a member of. No, no, Rho Chi, RX. And there used to be a women's sorority. I think it's fallen by the wayside. Well, I know it has at Oregon State. And there were faculty who were Phi Delta Chi who wanted—that's why basically Phi Delta Chi. It used to be both Phi Delta Chi and Kappa Psi. Kappa Psi fell by the wayside, and Phi Delta Chi has been the predominant one. And I'm not even sure how active it is anymore. But Rho Chi still initiates top students each year.

**CP:** Mm-hm.

**JB:** There is also a leadership group, which is fairly new. I don't know what it is; I think it and Rho Chi do a joint induction ceremony each spring at LaSell Stewart, or CH2M Hill Alumni Center, somewhere like that. So, after Crossen died, they brought in Charlie Wilson, who had been at Minnesota and was down at Texas. And he was co-author of a very famous, well-established—became very well-established medicinal chemistry textbook; it was Wilson and Gisvold. And Ole Gisvold was also at Minnesota. They started at Minnesota, and it was the first—it's the one I had as an undergraduate, even. And it later got to be multi-authored. I ended up being a co-editor for a couple of years of it, and author of a chapter or two for one or two editions.

But anyway, he came, and he was told he was supposed to try to start increasing the research capability. [0:30:00] So he was hiring young faculty out of grad school. There was a new pharmaceutics person who was a pharmacologist. Pharmacologists got a good grant fairly early. I never was able to get anything big. I would get smaller grants, so. And the pharmaceutics person went off to industry. That was Dick Muhlhauser.

**CP:** There was an addition to the building made that was—

**JB:** That was just going on when I interviewed. They were in the finishing stages. I came in December for the—well it was Christmas Break. And in fact, [laughs] you know how you usually pay to bring a person out for an interview? No. I took my wife to Yakima for the first time at Christmas time. After Christmas, we drove down, took one of my dad's, or my mother's car, and drove down to Corvallis, went through the interview, and I think I might have got reimbursed for mileage later. He did pay for staying in a motel on the way back, because there had been quite a bit of snow. So, got me cheap, as far as [laughs]—there was none of this hiring start-up money, start up your lab, and all of this type.

But to answer your question, when I came, the faculty were scattered around campus because of the addition. So when I arrived in September, they were all back in the new building, and the labs were set up.

**CP:** And I assume it was pretty impactful, the new space?
JB: Potentially yes. It did start some research going, and we started seeing some increase in graduate students. There used to be a Department of Pharmacy Administration, with maybe one other faculty member and department head. [Laughs] I'm not sure; maybe there were two. There's an interesting story that goes: Charlie Wilson worked very hard to get that addition put on. And he got approval, and I guess in those days it definitely had to go through the legislature. And the new offices were all to be labs, with fume hoods, and faucets, and the gas outlets, and so on. He went to NIH. Money was a lot more plentiful from the federal government in those days. He went to, I think it was, NIH—makes sense—and got a grant to outfit these offices as labs. And unbelievable, the state said, "We budgeted X amount of money. Since you got this federal money, we're going to subtract the state money." And so, he sat down at the plans, and put X's through, marking out which offices could have labs, and which ones could not have fume hoods.

CP: Hm. Did you get one that had a lab?

JB: I had one that had a hood, yeah, because I was a new, young assistant professor. But that's how strange things were in Oregon, for example.

CP: Which department were you in?

JB: Either we were called Medicinal Chemistry or Pharmaceutical Chemistry; I forgot which.

CP: Okay.

JB: At the industrial level, the term Pharmaceutical Chemistry is what, at the academic level, we might call Pharmaceutics. Just formulation, and the drug design is in Medicinal Chemistry. But in academia, it seemed like Pharmaceutical Chemistry was the drug design area.

CP: So what were your responsibilities in this initial position?

JB: Well, I was very surprised to find out I was going to be teaching a lab in Medicinal Chemistry. I didn't think there was such a thing left. So I taught a lab in Medicinal Chemistry, which took a lot of time.

CP: What do you mean by such a thing that was left? Sort of an older approach to—?

JB: Yeah, yes, yes. Oh yeah, they did various—so I built a [laughs]—oh, I honest to gosh cannot remember where these experiments came from, and so forth. But it took years to get rid of that lab. I did not teach in the—we had a Pharmaceutics Analysis Course, and there was a lab in that. Those labs slowly disappeared as more didactic material got into the course. Starting in the second year, I taught the Biochemistry course, because that was my minor at Wisconsin. And the story on that is very, very interesting. I see a smile, so maybe you know part of the story. [0:35:01] The dean and one of the other senior faculty had daughters, I think both daughters, who were in Pharmacy and would really complain about the quality of instruction from the Department of Biochemistry—now it's Biochemistry and Biophysics. And one of the complaints was that each quarter they would keep changing instructors, and that made the Biochemistry faculty angry. And finally, the dean says, "I'm going to yank the course. Start teaching it, John, and try to make it unique." Well, they had a rule in those days, there was to be no duplication of coursework on campus. And they really got uptight about it.

So, over in the Pharmacy School, you couldn't get a reading on what was being covered with the students coming in who had had the Biochemistry course, because there's this rotation of instructors going on. It was a service course. And the Pharmacy students would start to complain, and they're kind of a cohesive bunch, and that made the Biochemistry faculty angry. And finally, the dean says, "I'm going to yank the course. Start teaching it, John, and try to make it unique." Well, they had a rule in those days, there was to be no duplication of coursework on campus. And they really got uptight about it.

But I did, and I started with a course towards a clinical approach and a nutrition approach. So I started to change a lot of stuff in the—I mean, it was still basic biochemistry, still went through intermediary metabolism. We still went through protein chemistry; no labs, though. Chemistry of carbohydrates, and then what was known about DNA and RNA, and of course that just mushroomed. But I picked up and started to cover diabetes, the biochemistry of diabetes, the biochemistry of hyperlipidemias, before there was much known about hyperlipidemias. I think everything was cholesterol in those days, and so on.
And then I wrote a paper for the American Journal of Pharmaceutical Education on a clinical approach to teaching Biochemistry. The most successful paper I ever wrote, all of my 100 reprints disappeared. They all got requested. I gave an oral presentation at the American Association of the College of the Pharmacy, annual meeting, and it was packed. I was on a roll! It was not what you call a research paper. Well, the chair of Biochemistry and another faculty came over to have a meeting, and said, "We teach that." Well, they didn't teach that approach. And they finally ended up saying, "We just want you to know that we teach it, too, but you can go ahead and teach your stuff." [Laughs] Okay. I got along actually with most of them over there fine. We got along.

But every so often, it would come up. One of the faculty members over in Dixon, in the dressing room, and it came up that this faculty member was in Pharmacy, and this other, this fellow in Biochemistry says, "So how come it is you keep teaching that Biochemistry course?" [Laughs] There was a physical chemist in our living room. My wife is very active with American Field Service, AFS, and there was a group in our living room. And the physical organic chemist said, all of the sudden blurted out, "You know, you really have no business teaching Biochemistry." It wasn't even his department! [Laughs] Somewhere along the line—I had a different reputation in parts of the campus, I guess. It's kind of fun. Once you get tenure, what are they going to do, you know?

CP: That's funny.

JB: But eventually, when we went to the Doctor of Pharmacy program, we met with Chris Mathews, the Chair of Biochemistry, and basically they took the course back, and it was a higher level course that we had the students in, rather than the service course. I told them what I was going to continue teaching, which was the nutritional aspects, and some of the diseases. They said, "Fine. Can any of our students come?" And I said, "Sure." I don't think any ever did, but. So everything was fine. My understanding now what they have done is they're only requiring the first two quarters of Biochemistry, because we're still using the quarter system. And I'm not sure how they're handling the molecular biology.

It has changed so much, and with the heavy research emphasis, the faculty are extremely focused doing their teaching, and you get such a turnover of faculty going on in the Biochemistry, and that includes our courses, too. [0:40:01] It's very rare when you see one faculty member sees a course from a beginning to end. There's a course coordinator, who basically's job is to make sure the grades get submitted on time to the registrar. So there's a lot of this. You might say it's a medical school model that's going on.

CP: Did it seem that Pharmacy was resistant to change, in terms of the curriculum early on?

JB: No, in fact just the opposite. We seemed like we always had curricular upheavals. And that was going on nationally, too. There were all of these trends that you've got to change the clinical pharmacy, you've got to do this, you've got to do that. You've got to put in communication skills. You've got to put in cultural sensitivities. [Laughs] You know! Oh no; oh no. It was always in a state of flux, always going through transitions. And what do you do about a student who was not right in sequence, and the curriculum changed? What do you do for them? No, oh no. I'd say just the opposite. We were very fluid. [Laughs]

CP: Tell me about setting up your research at OSU.

JB: [Sighs] That got off to a slow start. I basically had some undergraduates, and I really had trouble getting going. I did one based on my PhD, and got the paper published. But I was always fascinated with what is called quantitative structure activity relationships. It's a statistical method of drug design. And I end up with a graduate student named Doug Henry, who is very good with statistics. And that's basically, with Doug, is where I got the bulk of my papers. I had a couple of other graduate students that got papers, but overall, I basically got into the drug design area, and was publishing in that area. And I would go off to the Gordon Research Conferences.

Started to get a little bit of money from the, oh, shoot, Army, the Army, and it was not the chemical warfare bunch, that type, and go back to their research conferences, and did certain things with them. I mean, published, and nothing was classified. And I made a contact at a Gordon Conference. So, let's say that's basically what I did. I don't have that many papers, and I never really got any real big grants. I think the biggest I ever got was ten or twelve thousand.

CP: Was the Model Pharmacy, the Model Drug Store, still around?
JB: When I came? Well, there was a prescription lab, and they had cubicles. So the students learned to dispense, and there was phones, and some faculty member or grad student would function as a doctor, phoning in prescriptions. So there was still that, yes, but that's disappeared.

CP: What was your sense of kind of the climate on campus when you arrived, and the '60s proceeded, and that sort of tumult arose nationwide?

JB: Well, when I bicycled onto the campus that late September, first day of classes, there was a group of freshmen in green beanies, and I was dumbfounded. I could not believe this. Because I had been to Washington State. There was no such thing as green beanies. I mean, it was just a regular university. I could not believe it. It was a cow college. It was an Ag school. When I saw the PhD curriculum, it was loaded with coursework.

And the story goes, and I want to emphasize story because I never heard it face-to-face, but the dean of the graduate school in those days believed in lots of coursework, because he knew that Oregon State PhD graduates were not going to go to the big research universities. They were going to go to the smaller schools and be teachers. So they need to take a lot of coursework so they could teach a number of subjects. Oh? Well, that's interesting. Obviously I knew I wanted to get tenured. And my third year, I got a letter from the President of the University, Dr. Jensen, saying, "You have tenure." I thought, "I like this. I like this place!" [Laughs] Okay. I wasn't promoted yet, but I had tenure after three years. And normally—

CP: So you didn't have to go through any sort of process? [0:45:00]

JB: Oh, no! No. Okay, then he retires, and goes off with the Rockefeller Foundation somewhere. And they bring in President MacVicar, Robert MacVicar, who was a one-man show; there is no question about it, a one-man show. It turned out he was a member of our church, and so at our annual church picnic he was there with his wife. And there was an OSU faculty member who was taking him around and introducing him, so I got introduced to him. Well, it turned out that I had learned ahead of time that, yes, he was a graduate of the University of Wisconsin, his PhD's in Biochemistry, and a person who I actually taught my major professor's course to, the undergraduates at Wisconsin.

And there was an individual who was on sabbatical from industry, a man named Dave Perelman, who was just a gentleman. And he gave the vitamin lectures in this course. And somewhere along the line, Dave Perelman told me, "Oh, Mac," as MacVicar was called, "and I were graduate students in the same lab in medicine. Say hello to him." And Perelman later became Dean at Wisconsin. So here I am meeting President MacVicar, and I said, "Yeah, I know Dave Perelman." Oh. "And he's now keeping—he's both dean and maintained his research program." And Mac's comment was, "Well, it's only dean of the Pharmacy School." [Laughs]

I went back and I told Dean Wilson; I said, "You've got a problem. You've got a big problem." [Laughs] He did have a problem, it turns out. I mean, well, he went on and did his retirement, and so forth. No matter of everything he said, I've never heard of Mac firing anybody without due cause. But what happened, getting on back to my own personal, I went up for a promotion, and it was turned down. This was happening all over campus, because he wanted a standard dossier where you used outside referees. Well, it through my department; he didn't know what to do.

But to Wilson's credit, Dean Wilson's credit, who had been at Minnesota and at Texas, he knew exactly where Mac was coming from, and what had to be done. He says, "Okay, here is what we are going to do." We got the outline. I need outside referees. And so, I had professors at schools function, and non forma. And then I did get promoted next time around, and then made it to professor on the first time around on that. So, but that was happening all over campus, and not only were young faculty in shellshock, but you had department heads who had never been turned down; all they did was write a letter saying they wanted so-and-so promoted and tenured, and it was done.

You had deans who had never been turned down, and it was [laughs]. You look back on it and you laugh, but oh, yeah, it was a traumatic time! There was no question about it. But the result was Oregon State University today. And what I never have understood is why there is no building or anything like that named after him. There are young faculty who have no idea who he, who Mac was.

CP: And you give him a lot of credit for propelling the university forward?
JB: Oh, I would say without him, we would still be second fiddle to the University of Oregon, and I mean real second fiddle. I think Portland State could be ahead of us. No, he knew what had to be done, and he pushed. And as I say, as one person said, he was his own provost. We had a Dean of Faculty in those days, Dave Nicodemus, who was kind of the good cop.

CP: [Laughs]

JB: And Mac was the bad cop, as the president of the university. But I know—and he had quite a temper. Boy, he could flare. But I don't know of anybody who was out-and-out fired who locked horns with him. [0:50:00] He just let fly, and I just don't know of anybody who was. And I'm not saying there wasn't, but he really followed protocol. When he did not grant tenure to a faculty member, boy, he wanted to make sure everything was dotted, and he reviewed it carefully. I think he didn't want any lawsuits, obviously.

But I think he—I think basically—have you ever read about the fellow who was president for a long time at Boston—I want to say Boston, it was either Boston College or Boston University—Silverman, John Silverman [sic, John Silber]? There was a review in the Wall Street Journal of a book he had written. Well, he's dead now so it's been a couple, few years ago. But he brought the school, that school, up into a major research university and hired top-notch faculty, and he believed in academic freedom but he also wanted, believed in excellence. And it caused a real transformation. I kind of look at the two people—Mac never wrote a book, as far as I know—as two of the same type. They had this goal, and they knew it could be done, and if I get the right faculty I know it could be done. And he basically did.

CP: What else do you remember about him as a person? It sounds like you knew him a little bit on kind of a personal level?

JB: He was very distant. As I say, we were in the same church, and he just never seemed to let his guard down till after he retired. He just lived over here a couple of blocks away. And one day after he retired—I don't know if he was here with a petition for us to sign or what, but he showed up at the house, "Come on in." Sat down on the couch out there, and just talked. He even talked about being hired, and things. He just—everything was fine; he was retired now. There was no barrier between us. There was a neighborhood dessert from our church, and we got the thing mixed up on our calendar. So [laughs] my wife knocks, pushed the doorbell and said, "We're here for the dessert." Well that was last night or last week. I said, "Oh, gosh!" He says, "Come on in. I think we have some pie or we have some cake." And his wife was always very gracious. And we sat down and visited for a while. [Laughs]

CP: What other colleagues were important to you at OSU, within Pharmacy or elsewhere?

JB: Well, there was my department head Bob Daugherty, who was very good. One that we were basically parallel to each other was George Constantine, who's here—I mean, he's over in Albany, but he's another one you can always interview. Let's see. As far as contemporaries, I would say those two, for the most part.

CP: In doing some research on Pharmacy's more recent years, a couple of names that have stood out as people who have made an impact—

JB: Oh, I'm sorry. I've got to speak one more. The dean who, the gentleman who replaced Charlie Wilson was Dick Ohvall.

CP: Who was there for a long time.

JB: Yes. And he said, "John, how would you like to be on the Board of Pharmacy?" And I said, "Okay. That sounds like an intriguing deal." Because I wasn't setting the world on fire research-wise.

CP: This is the State Board of Pharmacy?

JB: Yes, the State Board of Pharmacy. So I think I put my name in, and the old guard in the profession, "We're not going to have a faculty member on the Board of Pharmacy. It's ridiculous!" And a vacancy came up again, he said, "Let's make another run at it." And I don't know what happened behind the scenes, but I got appointed to the Board of Pharmacy, Neil Goldschmidt. Now, he didn't know me from Adam; it's all done by appointment's office. And they of course check
politics, and I'm sure the Board of Pharmacy was not on Goldschmidt's political radar screen. So I got on the board, and it was an executive director on the board, Ruth Vandevere, who had a real vision of where pharmacy could go. She basically had been the author of the Revised Pharmacy Practice Act, which gave pharmacies a lot more responsibility in the state.

And I started to go to the National Association of Boards of Pharmacy and regional meetings. [0:55:00] Ended up authoring a couple of resolutions; got onto the task force of the board. Ended up being on one of the permanent committees of the National Association of Boards of Pharmacy, on one of the exam committees for foreign pharmacy graduates. So I would say Dick had a real impact. I was on the board for the mandatory eight years. When I say mandatory—you can't exceed eight years. And was president of the board twice.

CP: I was going to ask you about a couple of fellows from the Pharmacy Department, or the School of Pharmacy, who sound like they made an impact through their research, and one of them is James Ayers.

JB: Oh, yes, yes. He was on sabbatical somewhere, and I got a call from Professor Sandine in Microbiology, and I want to say it's Bill Sandine but I may have the first name wrong. But anyway, Sandine. And he wanted some way to develop some method of buffering bacterial cultures in the cheese-making process. And I said, "Well, the formulation person is Jim Ayers." And so Jim comes back and they meet each other, and they kept quite a collaboration going, and had one of the most successful patents of that era.

CP: Mm-hm.

JB: And Jim may still—and I don't know if the college is still getting some money, of course Jim getting some money.

CP: This is the time-release?

JB: Time-release, yes, right. Yeah, Jim developed industrial contacts, and he probably had one of the biggest graduate programs.

CP: Uh-huh.

JB: I believe he is completely retired on the coast, now. They no longer have a home here in Corvallis.

CP: How about William Gerwick?

JB: Oh, yes, yes. He and I actually co-taught the Biochemistry course, but Bill developed a fabulous natural products, and was eventually hired away by the University of California San Diego. But he had a large program, a very large program.

CP: You took a sabbatical in 1972 with Carl Djerassi.

JB: Yes.

CP: Tell me about that.

JB: [Laughs] Well, I wanted to take a sabbatical. And people do, so we arranged for the house to be rented, by I think a couple that was on sabbatical from somewhere else. And went down, stayed at—rented a house by an interesting older Polish couple who had not been back to Poland since the Second World War. Had, I think, family there. Anyway, so I worked in Carl Djerassi's lab. He's quite an individual, and of course father of the birth control pill, and so on. And got four papers out. It was a natural products lab, because we thought we were going to get really a Sea Grant going. And we had various ideas, and somehow we never could tap that well into the Sea Grant money here, but we thought we could get a Marine Natural Products thing going. It never did work out. But yeah, it was a good year.

CP: Did you get to know him very well?

JB: He's one of these people that has a fantastic memory, so he got to know you more than you got to know him. I mean, I was working on one of the papers, and I says, "I've been to Chem Abstracts. I'm not finding this reference." He got up and went over to his card file, pulled out something from don't ask me in all of that paper, but says, "Here." Now, he didn't do it in a way that I felt like shrinking into the floor, and I don't know how I missed this, but obviously I did. You didn't have
computerized search in the Chem Abstracts in those days. It was all done manually with these big, thick volumes in fine print.

But anyway, he came up here once. He retired as a chemist, and has written three or four novels and some plays, sort of a renaissance man, I would have to say. And he came up; I can't remember who brought him up, but I went over during the break and reintroduced myself. He seemed to remember who I was. [Laughs]

CP: He was friends with Linus Pauling, who was also in the Stanford area at the time.

JB: Yeah, and I can't remember if I did go over and hear one of Pauling's lectures or not.

CP: Pauling came back to campus a few times too, at OSU. [1:00:00]

JB: Yes. Oh, yeah. And the only time I heard him on campus that I am aware of—I can't remember if I went to any of the peace lectures later on, named after Ava his wife, but there was that one time when the Afro-American football players walked off the campus because of the beard incident with the—or mustache incident with Dee Andros, the football coach. And Pauling was to speak at Gill Coliseum, and the students came in and Jensen was president. It was an awkward situation, and I think Jensen felt very hurt by it, because he basically was a very fair man, but you're dealing with a powerful football coach who had powerful alumni behind him.

CP: Yeah.

JB: So it was, it was an awkward situation. And Pauling went ahead and gave his talk.

CP: You mentioned Dean Ohvall. He was dean for 22 years, the longest serving dean of his generation in Pharmacy, apparently. It sounds like there were at least a couple of changes that he invoked, and one of them you mentioned a little bit was an emphasis on increased experience in patient care?

JB: Well, that was going on during the—I would say that was a trend in pharmacy education all across the United States. And I mean, he was going to make sure we stay current.

CP: Mm-hm. So we were talking about changes in the curriculum, and the focus on clinical components, including communication skills.

JB: Yeah, the history of communication has been a very interesting one. For a long time the pre-pharmacy curriculum had some type of speech requirement. And the question was always: what is the appropriate type of speech requirement? Is it a, I think the word, expository speech, where you get up there and give your three-minute speech or five-minute speech, which is not what pharmacists do. They talk one-on-one, like you and I are talking to each other.

And so what you want is—there apparently was a speech course that supposedly was more how to interact one-on-one, rather than with an audience. I'm not sure if there's still a speech requirement in the pre-pharmacy curriculum or not. It wasn't there when I was an undergraduate; I can tell you that. I had it in high school, but what happened was mandatory counseling. In fact, I was on the Board of Pharmacy when the mandatory counseling requirement went in, and it was happening across the United States. Part of it was better patient care; part of it was get the pharmacist out there talking with the patient, rather than hiding behind the counter and having some sales clerk handling it at.

So, one of our—I guess you could call him faculty member; he's the director of the Health Service Pharmacy, Bill Boyce—had actually pioneered the technique for how to counsel a patient. And there's a little card, and there's three questions on it. I can't remember all how they went, but basically it was, what did your physician tell you about this medicine? So you first of all, rather than just get up there and lecturing them, you're trying to find out what they, what the patients understand, so you're not talking down to them. And that's also a good way of doing error-checking at the last minute, because if you're handing them an antibiotic and the patient says, "It's for my high blood pressure," you know just hang on a moment! [Laughs] We've got to check this out. But okay, we'll assume it's the correct prescription.

Another question might be, what did the—and you can elaborate on the response, or "Yes, I see you have a good understanding. What did the physician explain to you on how to take it? " And you find out, do they realize they ought
to take it before meals, or two hours after a meal? And I can't remember as to the third one, whether it's do you have any other questions you want to ask me, or did the physician explain any of the pertinent side effects? And there you're trying to—you're not trying to scare the patient, or they'll never take it. But you might also, if you do get a certain type of sensation, you need to either call your physician or call us [1:05:00], rather than simply go up and give them a spiel.

So you're trying to teach that type of communication on a one-to-one basis. Most of the pharmacies are not even set up for it, so you're trying to have some place in the corner where nobody else can hear the conversation, but depending on how noisy the store is.

CP: Yeah.

JB: Fred Meyer, they probably can't hear because of all the noise. Rice's, I think you can hear the conversation.

CP: I have a silly question, but probably one you've been asked before. How do pharmacists interpret the handwriting of doctors in most of the scripts they receive?

JB: A lot of it is practice. A lot of it is now electronic transmission. And one of the most important things is: phone and find out what it is that was written.

CP: [Laughs] So there isn't any secret code, in other words?

JB: No, no, and they're not supposed to write in Latin anymore. Fact is, I don't know Latin.

CP: Kind of looking through—

JB: Well, one of the resolutions we finally got through the National Association of Boards of Pharmacy was a test of spoken English—not written English; you're supposed to do that also, spoken English. And it's very interesting to see the opposition. And of course, there was all of this about political correctness, but you had to explain that the communication media is: you could have a resident at a medical center who is from one country in Asia, talking to a pharmacist who is from India, and the only thing they've got in common is the English language. I'm not saying the Asian one maybe is as good in English as the Indian one, but the point is, airline pilots and the control towers use English. [Laughs] So now, if a person, a pharmacist is dual language, so they can talk in another language and explain the directions, or hand the person a information sheet in the patient's native language—some of the computer programs will do that—great. That's excellent, but you've still got to be able to speak it.

CP: Now I want to ask you about, you served on a National Science Foundation Panel for Instructional Scientific Equipment.

JB: I did; you're right.

CP: [Laughs]

JB: I'd forgotten about that. Yeah, it was down in, I think Los Angeles, one of the things we all went down there. It was for undergraduate research, and it was a very interesting panel. It was the only time I did, and I'm not quite sure how my name got in there. I never got funded by it. Not even sure if I ever applied. But what was fascinating was you had good, solid liberal arts schools, the Lewis and Clarks—in this state, the Lewis and Clarks, the Reeds, the Willamettes, for example—applying for—they wanted a new NMR, new updated infrared spectrometer for their lab. It would be used—and they outlined the courses it would be used in, and also how it would function for undergraduate research projects. Oh, and they would also be able to show how they would be able to support the instrument, that they had the technicians available to keep it going, or experienced faculty. And you would fund those.

Then you would get a little, small liberal arts college that maybe had one chemist, two if they were lucky, who wanted this fancy piece of equipment, and you say, "How are they going to maintain it? Do they even understand how it works? Where is the course that it's going to be used in?" We wouldn't fund it. Or you got the application from the Chemistry Department at the University of California, or the University of Wisconsin in Madison, who just had to have a new hot-
shot NMR, and they were going to let the undergraduates walk by, [laughs] essentially. No, we didn't fund that either. [Laughs]

So we basically funded liberal arts programs—well, it didn't have to be—I'm sorry; I don't want to imply it had to be a private liberal arts school. A school like Western probably would not have any problem, either. They had to have a substantial—we were doing the chemistry area now. Please keep that in mind, not speaking of any other discipline. They had to have a core of faculty. One thing that really helped them was: did they have a program that met the undergraduate standards of the American Chemical Society? Which means they had to have enough—they had to have, basically, faculty in each of the disciplines, organic, physical, analytical.

CP: A seemingly important point in the modern history of the College of Pharmacy came in 1988, when the satellite campus was formed at OHSU.

JB: That is still a dynamic situation. Oregon State, like some of the other pharmacy schools of history, historical, are not on a campus where there's a medical center. And then the big debate is: does the school move to where the medical center is, or does the school stay where it is and try to do the satellite campus? And of course, we did the latter. Part of it is, how would you move our whole research emphasis and productivity? We are very productive, if you take a look at the amount of grant money this pharmacy school is now bringing in. Where would, how would it be situated? Where would be the support infrastructure? I mean, there's quite a dynamic support all across campus. There's the mass spec centers, there's the NMR centers, and so forth. So there's a real good synergism on a campus like this.

And so, how would that be handled in the Portland area? Because there's not a major, excuse me, Portland State, because there's not a major research university there. Portland State has got some real strong areas; please don't misunderstand me. And OHSU is a medical center. They're not teaching the basic science courses that would feed into a medical center. The students all come in from somewhere else. So, that's one thing. So initially, it was to get the clinical program established up there for the fourth year, and try to get rotations.

And that took—that took a lot of missionary work, you might say, to get the medical center to accept it. It seems to be working very well now; it really is. And of course, there's both the medical center, OHSU, and there is the VA. And there's the other big hospitals, Legacy, Providence, Kaiser. I'm trying to think of basic pharmaceutical sciences, and I have the impression, and I want to emphasize this is only an impression, that there is some pharmaceutics now up in Portland, as opposed to just the clinical.

CP: Well, another important moment came eleven years later, when OSU decided to no longer offer the bachelor's degree in Pharmacy, and to focus solely on the Pharm.D.

JB: Oh, yes. That's got a very interesting history. The question was money, for one thing, to finance it, because you needed additional faculty, particularly in the clinical area. And you had to pay going wages, because they could all work in the private sector. So the question came up, and I remember Dick, Dick Ohvall, talking about it, was: do we start a small Pharm.D. program, and just kind of shoehorn it in? And there was some type of educational coordinating committee that had to approve new programs, eliminated duplication. I think it's passed by the wayside now. And the chair of that committee made the comment, he says, "No, you wait until we can have a good program. We want an excellent program."

The other thing they did that, at the state level, was say, "You can't have a doctorate, a professional doctorate program, unless the students have a bachelor's degree." And there are these pharmacy schools, unfortunately in my opinion, who, a student goes through and get a doctorate of pharmacy degree, and not have any bachelor's degree. Well, can you imagine any medical physician not having a bachelor's degree? As far as I know, dentists do. I think all of the lawyers now have bachelor's degree before they get their doctor of jurisprudence. And so, we worked out essentially a seven-year program. Three year of pre-pharmacy. We made arrangements with General Science that they would accept courses in the first professional year, maybe some of the second, towards the General Science degree, so if they don't have a bachelor's degree, they will by the end of their second professional year. And they have to before they take their last two years.

Now, it turns out I believe over 90 percent are coming in with bachelor's degrees now. But we were one of the first schools to require this bachelor's degree requirement. I think Ohio State was coming—the other OSU, ironically, or
coincidentally, or whatever—I think is in it. I believe the University of California San Francisco has always—I shouldn't say were one of the first. I think they always—they're one of the pioneers for the Pharm.D. program, and I think they've always required a bachelor's degree. I think they always did. And that may have been true of USC, also.

My understanding is a large number of the state pharmacy schools, the well-established states, at the state universities, now have got so much in their pre-pharmacy that essentially, there's a bachelor degree requirement. I don't know about Pacific, for example, if a person, a student, can walk in off the street, and four years, or a year later—actually they have a year-round curriculum, three and a half years—walk out with a Pharm.D. without a bachelor's degree. I don't know, frankly.

CP: Well, it sounds like this shift in the Pharm.D. led to an even closer tie with OHSU?

JB: Yes.

CP: It became a joint degree between the two universities.

JB: Because it required a lot more clinical faculty, it required more clerkships, and making more rounds, and that, yes, yes. There's no question about it.

CP: I want to talk a little bit more about your career. You mentioned your time on the Oregon Board of Pharmacy. One of the interesting things that you were involved with there was assisting with the interpreting and implementation of the plan for assisted suicide law. Can you talk about that?

JB: [Laughs] Yes. That was a fascinating experience. Here was the situation. You had the potentiality of a pharmacist, who was opposed to it, receiving a prescription and not realizing why they were dispensing it. And in fact, under the patient counseling, they might go out and give a bunch of goofy advice, and may not even realize what's happening. And then you have the situation with, "Wait a minute. I'm not going to dispense this," and pull it back. So, there were various scenarios.

The sponsors of the physician-assisted suicide made no if ands or buts about it. There was to be nothing hidden from the pharmacists, nurses, anybody. It was to be an open process. Anybody who did not want to participate needn't. And they actually had networks of physicians, and pharmacists, and nurses, and so forth, who were positive. They could always put a family in touch, get them into the system. So we went back and forth with the Board of Medical Examiners. No, no, scratch that. We went back and forth with the Oregon Medical Association.

It turned out that we seemed to pretty well have the support of the physicians, including the officers, but there was a lobbyist who was taking his cue from the American Medical Association, and if a physician doesn't want to tell the pharmacist anything, that's it. God has spoken. And so we finally wrote a rule that said physicians had to tell the pharmacists. Well, all of the sudden you had the Board of Pharmacy write a rule governing the pharmacists. Board of Medical Examiners were not upset, because they couldn't get it, they were being shoved, not pushed, not to, and we now had our rule. And the physicians, the Oregon Medical Association, their lobbyists, didn't like it at all.

So of course, by this time I believe Dr. Kitzhaber was Governor. And so in the mean time, we were trying to get through a clarity [?] drug treatment through, which the attorney general said we had the authority to do, but the drug industry didn't like it. And this is where pharmacists can be involved in working out the treatment modalities, and the dosage, and so forth. So another board member and I were called into the governor's health advisor office. And basically [1:20:00], what the governor did is he told the medical board, "You take that Board of Pharmacy rule, and you rewrite it with your name on it instead of their name, and you push it through," which they did. In fact, there was a draft and we approved it. We thought that was fine. We didn't care! [Laughs] All we wanted was the pharmacists to know that these prescriptions were coming through. And so we told the health advisor, "That's fine with us."

And then he said, "So what, now, is it you're trying to do?" And we mentioned clarity [?] drug therapy, and this fellow was a former EMT, or something on the ambulance. That's how he knew Kitzhaber. They were fishing buddies from southern Oregon. And he looked at it and says, "Well, is that like when I'm on the ambulance, I can start the IV for a person in cardiac arrest?" I said, "Yeah." "Oh, okay. You've got it. I'll tell the lobbyists from the OMA that it's going to
go through.” So we got what we wanted, and the physicians got—well, they didn't know they got what they wanted, but at least they had face-saving on it. So yeah, that's the story.

CP: Huh.

JB: We're all happy campers now. [Laughs]

CP: [Laughs] You mentioned, too, that you served on the Foreign Pharmacy Graduate Equivalency Committee?

JB: Yeah, that's the exam committee with the National Association of Boards of Pharmacy.

CP: Uh-huh. What did that entail?

JB: Oh, you had a significant number of graduates of foreign pharmacy schools that wanted to emigrate to the United States and practice pharmacy. And there was no equivalent of a basic pharmaceutical science—a basic medical exam, basic medical science exam. There's something that medical schools have. After a couple of years, I guess everybody takes this test before they go out in the clinics. I'm really not quite sure how it works, but there apparently is some type of standard test. There's nothing like that with pharmacy, so this is the closest thing to it. And there's other requirements for the graduate. They've had to have had so many years in a pharmacy school. There has to be certain curricular standards, and so on. And there is a test of spoken English, by the way, they have to pass. And of course, the test of English as a foreign language; they have to pass that also. So basically, there's a bank of questions that we work on.

I happened to be in the medicinal chemistry area. That's supposed to be equivalent to what, if they can pass it, then they have met at least the minimum standards of graduating the didactic coursework in a pharmacy school. Now, they still have to do their interning, and that sort of thing. So I was in the medicinal chemistry. We'd meet twice a year. We would come up with questions, just like SATs, any of these questions that are on there that are going to count. And there's questions that are being tested to see if they're discriminating—are they too difficult? Are they too easy? And so we would be working on new questions, plus trying to fix the questions that didn't test right.

One of the things I did was, as they developed this exam, the chemistry portion, some of the chemical structures were pretty bad! They were bad. So I says, "Well, I've got a Chem Draw program," which was sort of the standard, so I worked out a deal with them. I didn't get paid, but I redrew hundreds and hundreds of structures, using the same program.

CP: Something else that you worked on that is interesting to me with my background on Linus Pauling, he developed the model for general anesthesia, and I understand that's something you've studied, too, the controversy over general anesthesia?

JB: Well, that's one of the contracts with the Army, and we were trying to see if there was a receptor for it. I think there is, because they've got optically active stereochemical, left- and right-handed molecules. One is active; the other is not. So there must be some type of receptor. But that never led to anything.

CP: Do I understand correctly there still is no accepted theory of why general anesthesia works?

JB: I think there is some theories for it, but I'm not—there's some about nerve conduction, where it's going, depolarization of neurons. I think there is some of that now, because they can visualize the brain so much differently nowadays, with the various types of scans, the PET scanners and all of that, that they can get some idea which neurons are firing [1:25:00], which parts of the brain are reacting in certain ways. So I think they're closer.

CP: Mm-hm. Well, you retired in 2003, after 37 years in the College of Pharmacy. You saw a lot of change. I wonder if you could reflect on the changes in the college over the course of that time?

JB: Well, I mean, we've been talking about them.

CP: Yeah.
**JB:** But basically it started out to be a traditional five-year bachelor degree program, medicinal chemistry, pharmaceutical analysis, formulation, basic pharmaceutics, what they called physical pharmacy, dosing, standard classic pharmacology. And they were still teaching pharmacy management as if you were going to have your own drug store, so I think there was some accounting in there.

And as it became more and more obvious that pharmacists were going to be employees, you saw the management evolve into pharmacy socioeconomics.

So here started to be the discussion of healthcare delivery, which population groups can get it and why, which ones cannot get it and why not, various types of insurance models out there. Then as I said, the labs disappeared, as far as the pharmaceutical sciences went. There is still—I think they still do a little bit of compounding, some basic compounding, but I think that's about it. I'm not even sure.

It's a small lab, and they've got some sterile hoods, and I think that's about all they're doing. I think; I may be wrong. You'd have to ask somebody, like the associate dean or somebody. Big emphasis on patient care, big emphasis on the clinical pharmacy aspect, which is the person has a certain disease, or a couple of diseases, and this drug causes this side effect, and this drug. Or a person shows up, and they're taking six or eight—I'm not exaggerating—six or eight different drugs. Can that be whittled down to three or four? Because they take a drug, they get a side-effect, they take a drug to treat the side-effect, and so on. It's messy.

Of course, with the area of diabetes, just to use that as an example, it used to be basically insulin and a couple of oral medications. Well, there are several oral, and there's a whole bunch of other drugs that have been discovered that affect the pancreas, affect the alpha cells or the beta cells, and now there's even looking at the autoimmunology aspect, autoimmune aspect of it. All on the clinical side.

**CP:** I know that one of the pursuits that you've followed into retirement is you are a volunteer Medicare resource.

**JB:** In this state it's called SHIBA, Senior Health Benefits Assistance Program, there's that notebook that's sitting over there, beside you there. Nationally it's SHIP, Senior Health Insurance Assistance Program, with the A having been dropped. Until very recently, we were a part of the Center for Medicare and Medicaid Services. I'd have to go to the computer and find out who the new federal agency is we are moving under. I guess the move is not complete yet. And I'm not sure politically what the heck is going on. We got moved.

But, we go—I started back in 2005, when the Part D drug programs began. The person who was the coordinator was looking for volunteers desperately, because they needed people to put the drugs into what was called Medicare.gov Plan Finder, and find out what Part D plan would work for them. I was retired from pharmacy, so [laughs] I've been at ever since. I was SHIBA light for a couple of years, and then full. I think I'm the senior one in Benton County now, I believe.

Anyway, we of course go through training. We have to be recertified every year. We go through a background check, which includes fingerprinting. Obviously, we have signed all the confidentiality agreements. We log every contact that goes into obviously a secure database. And our password changes every two months. I also am one of the instructors, we either call it Due to Medicare, or ABCD's of Medicare, Part A, Part B, Part C, Part D. [Laughs] And that's a two-hour free course. Most of them are taught over here at the Men's Center, because they have the parking and they have the classroom with the computer facilities. [1:30:01] And I'm currently on phone duty now.

Oh, I should explain. If you have a Medicare question and you want to talk to a counselor, there's two ways of doing it. One is to call the toll-free number in Salem, which you can get off of the web. Put Oregon SHIBA in, and it'll take you right there, and you punch in your zip code, and it automatically is referred then to Albany. Our sponsor here is RSVP, Retired Senior Volunteer Program. And the sponsors for the different SHIBA/SHIPs vary. In Portland it's Multnomah County Department of Health, I guess, is their sponsor. And I can't tell you who the sponsors are in other counties. Linn, Benton and Lincoln are together. But anyway, they'll go into the RSVP office at the Counsel of Government's office on Queens Avenue over there in Albany, and then an email will go out to the appropriate county with a referral.

And I'm on phone duty, and the main reason for that is, I can't remember—I may have mentioned when you came in. My wife is in a foster home, and she's actually in her hospice, so I go up three times a day and feed her, [coughs] excuse me.
And I can't get up to the Senior Center, so I get the referrals and so forth. Which is kind of interesting. Actually, I enjoy it, almost better than—I don't mean anti-face-to-face, but you can get quite a bit of information over the phone.

**CP:** Yeah. It seems—

**JB:** And we have Google Calendar to make appointments. I can even make an appointment form.

**CP:** It's such a seemingly complicated subject to be dealing with.

**JB:** One of the things we mentioned in our classes, and will tell clients when they almost are feeling sheepish—when we worked, and you had employer health insurance, you took the employer plan. That was it. You might have had a choice between a high deductible and a low deductible, but basically that was it, folks. And they may or may not have had dependency coverage.

Okay, now you're reaching 65. What are you going to do? Are you going to keep working, if your company or your employer says, fine? If then, are you going to draw Social Security or not? And a lot of people think, "If I don't draw Social Security, I don't go into Medicare." And no, wrong. At age 65 you have got to enroll in Medicare or you are going to get penalized. And the penalties can be significant, by the way, unless you happen to be in an employer group health plan of twenty or more employees. [laughs] in which case, you can delay it. [Laughs] You know, so Medicare has been described as, "Yes, no, and with the following exceptions."

**CP:** [Laughs]

**JB:** But it is universal healthcare, single-payer, for the 65 and over, and for disabled. It interfaces with private insurance to pick up deductibles, and co-insurance. And this is where a lot of people, then, "Should I go with a Medicare supplement, known as a Medigap, or should I go with an Advantage plan? And if I decide to go with an Advantage plan, which one should I go with? If I decide to go with a Medigap, which one should I go with?" So there are these various—and then there's the follow-up enrollment period where people can change plans. And now with the Affordable Care Act, the Medicare crowd all start making appointments, because they see all of this focus in the Affordable Care Act and they want to know how does this affect them? It doesn't. Well, it does, but there's nothing they can do about it.

**CP:** [Laughs]

**JB:** Well, the effect is basically beneficial. The donut hole is slowly disappearing into Part D.

**CP:** It's neat for you to help people navigate this.

**JB:** Oh, it keeps us mentally alert and morally straight! [Laughs]

**CP:** Well, just a couple more questions for you. The new building in Portland just opened up.

**JB:** I haven't seen it, but they say it's very nice. The other tower, they had this beautiful view of the river. They could even watch barges being launched out of it. But I have not seen the new one, other than drive by it as it was going up.

**CP:** It strikes to me as being another important chapter, I guess, in the history of Pharmacy.

**JB:** I think they worked very—they being the current dean and the previous dean [1:35:00]—worked very hard to make sure we have the floor space, and the labs, and so forth, to be a fully—not move us there, but to make sure that the faculty there have the resources, and are to advance. A number of them are hired as clinical assistant, clinical associate professors. That's a non-tenure track type of deal with a revolving, fixed term type of thing. But there are tenure-track faculty over there, too.

**CP:** The last thing I want to ask you about is that the university has changed so much in the last few years, and continues to change and grow. I want to get your perspective on where the university is heading right now.

**JB:** Well, I have the impression that we want to be the strongest university in the state, which I have no problem with. We are, of course, in every county. I think our relationship with the state is quite good. The amount of extramural funding that
we bring in is phenomenal. It's not just NIH; there's Ag, there's Sea Grant, and all of that type of thing. I think the question that OSU has to really wrestle with, as do any research university, is making sure that the undergraduate still has a good educational experience, which at a good research university they can. You have good students, and you get them involved in the searching out of new knowledge. It can be a fabulous, fabulous experience. But the faculty have to want to enjoy working with undergraduates, not just their graduate students and their post-docs.

And for that young assistant professor, that can be a time challenge; that can be a strain. Because it's hard to get the funding. I mean, back in the days when the funding was more plentiful it probably wasn't, but they are struggling to bring that money in, and they're hired now with fairly generous start-up packages. And in return, the university wants them to be able to produce, you might say almost pay it back.

**CP:** [Laughs]

**JB:** [Laughs] So it's a rough go. But I have to be very candid and say, would I, today, start out the same way? I think in Pharmacy it was fine, and with the clinical pharmacy and so forth, I find that more—a lot more interesting. Maybe more interesting is the wrong word, but I don't know if I would like to be under that constant gun of getting funded, and getting it renewed. I just don't think that's my temperament. I feel very fortunate that Dick Ohvall kind of took me under his wing there, and said, "Why don't you—?" I think he saw I wasn't going to pull in big bucks, "Why don't you look at the regulatory?" And I think I was successful there.

**CP:** Well Dr. Block, thank you very much. This has been very educational for me, and I appreciate you giving us this time to share your memories of Pharmacy.

**JB:** Thank you for coming. And whatever I said, I'll deny it. [laughs] [1:38:32]