

CHEMICAL HERITAGE FOUNDATION

STEVE DUZAN

Life Sciences Foundation

Transcript of a Research Interview
Conducted by

Mark Jones

Scottsdale, Arizona

on

2 May 2013

(With Subsequent Corrections and Additions)

CHEMICAL HERITAGE FOUNDATION
Center for Oral History
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INTERVIEWEE

Steve Duzan was born in Oregon in 1941, though he and his family moved to Seattle, Washington when he was ten years old. He was raised by a single mother after the death of his father. His mother worked as the assistant to the CEO of the department store Bon Marché for twenty years. Wanting to become a lawyer, Duzan attended college at Dartmouth University in New Hampshire, but found it difficult to adjust to life on the East Coast. He returned to the West Coast and finished his undergraduate career at the University of Washington, where he studied political science and history. He entered law school in 1963, but came to realize he did not want to pursue a career as a lawyer. He became interested in entering the business world and began working for a manufacturing company in Seattle, where he was put through a management training program. He worked for an air pollution control company before he was approached by a local group, who asked if he would be the CEO of Arco, a packaging and plastics company. He ran Arco for five years until the company was sold in 1980, after which he had a brief stint helping a friend in his industrial ice machine business. He was then contacted by patent lawyers about a new biotech opportunity headed by two scientists at the Fred Hutchinson Cancer Center. Duzan then met with Steve Gillis and Christopher Henney, and the three began the biotechnology company Immunex. Immunex was incorporated in July of 1981 and ran their offices and labs out of an old marina hardware warehouse in Seattle. Immunex later went public in 1983. During Duzan's tenure as CEO, he oversaw the development, production, and licensing of pharmaceuticals such as Enbrel. After his retirement, Duzan stayed with Immunex for three years as a consultant, before ultimately moving to Arizona with his wife, where he continues to do consulting work for companies.

INTERVIEWER

Mark Jones holds a PhD in history, philosophy, and social studies of science from the University of California, San Diego. He is the former director of research at the Life Sciences Foundation and executive editor of LSF Magazine. He has served in numerous academic posts, and is completing the definitive account of the origins of the biotechnology industry, entitled *Translating Life*, for Harvard University Press.

ABOUT THIS TRANSCRIPT

Staff of the Life Sciences Foundation conducted this interview, which became a part of our collections upon the merger of the Chemical Heritage Foundation and the Life Sciences Foundation into the Science History Institute in 2018. The Center for Oral History at the Science History Institute edited and formatted this transcript to match our style guide, but as noted, Science History Institute staff members did not conduct the interview.

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INTERVIEWEE: Steve Duzan
INTERVIEWER: Mark Jones
LOCATION: Scottsdale, Arizona
DATE: 2 May 2013

JONES: Okay. So Immunex people.

DUZAN: Well, I suggested Stewart Parker. She was the first person we hired before we had a door or anything to open. And she worked through a series of positions. Initially, I hired her and said, you know, “You have to do everything, from keep the books to handle any correspondence, we get, anything of that kind of—” oh, she had just gotten her MBA at UW. And, “But there's no work that'll be beneath you, until we get enough going here that we need a staff. And then you can begin to do some more serious kind of business work.”

JONES: [Yes].

DUZAN: She accepted it on those conditions. And ultimately, when we spun out Targeted Genetics, we spun her out as the CEO of Targeted Genetics. But she was through the whole thing, and she provided an interesting woman's perspective on all that went on. She was a vice president of Immunex, and held a number of positions, in corporate communications. She was a very, very talented lady.

JONES: Okay. Good. Where is she at now?

DUZAN: She's in Seattle. H. Stewart Parker.

JONES: All right. I'll look her up.

DUZAN: Yeah.

JONES: Good. Others? What about some of the other scientists? Maybe working under Gillis?

DUZAN: Working under Steve Gilles?

JONES: Yeah.

DUZAN: Well, I'm sure Steve would have some ideas on this, too, but I think that David Urdal, who I—may still be active. He was doing something at Dendreon as recently as a couple of years ago, and I just haven't heard anymore since then. But he was very active, and he was a protein chemist, and very active in some of that early cloning of the interleukins and stuff that we did. He would have some interesting scientific perspective on that type of thing.

JONES: Okay. Good. I find it—usually, once we get about six or seven people from one place, then we start to get—you know, we get multiple perspectives on everything. We start to get a good sense of what was—

DUZAN: Another woman is Susan Urb, who came to work for us in the science operations and was one of the very first employees in that. And then while working, got her MBA also. And she moved on into operations. But she built our first plants. She built all of our laboratory facilities. Everything that had to do with a facility was under her. She put in generation after generation of scientific equipment. So she has a, kind of, an interesting view on the nuts and bolts of the building of a biotech company.

JONES: Yeah? Really?

DUZAN: As you—as we integrated functions, starting with, obviously, science, and—but then moving on to manufacturing, and then the marketing people came in, and she had to provide for them.

JONES: Okay. That's good. Well, listen, what I'd like to do with this is put together a biography, basically. We're interested especially in the biotech stuff, but why don't we start with your background.

DUZAN: Okay.

JONES: So tell me about yourself. Where do you come from? Where were you born?

DUZAN: Well, yeah. I was born in Oregon in 1941, just before World War II began. I have very little recollection of World War II. But I moved to Seattle when I was ten with my family, and lived there through high school, went off to Dartmouth for a while, transferred back to the University of Washington. I was—

JONES: Tell me a little bit about your family. What's the background there?

DUZAN: I have two siblings, both of whom are still living, both of whom are younger than I am. And I have my father died during World War II.

JONES: Oh.

DUZAN: He was not killed in combat, but he died of kidney disease that he contracted when he was in training. So my mother was a single mother before—long before single mothers were any kind of vogue. And she was quite a lady. She had had—she was educated before she had any kids, and—which was not all that common, incidentally, at that time.

JONES: Right. Yeah.

DUZAN: And she took us to Seattle so she could pursue her interests, which were merchandising and fashion. And she went to work for what's called the Bon Marché up there, now part of Macy's, and rose through the ranks there. She was the assistant to the CEO of—yeah, CEO of Bon Marché for twenty years up there.

JONES: So even though you had a single mother, she was doing pretty well?

DUZAN: She had a wonderful career of her own. Long after the kids were out of the nest she continued that. And she's dead now. She would be ninety-three if she was still living. And I'm from a <T: 05 min> cattle ranching family who went to Central Oregon as pioneers in the 1860s and '70s.

JONES: This the Bend area or some—

DUZAN: Well, Bend—yeah, east of Bend there's a small town called Prineville. Prineville is the oldest town east of the Cascades in the Oregon Territory, older than Walla Walla, which was

a very early missionary settlement. It was the—well, there was a blacksmith shop and a place for provisioning for the Oregon Trail on the final push to [inaudible], Oregon, where most of them went. And my family stopped there because they were cattle people, and there's good cattle raising, grazing, in that area.

JONES: Was there any of that left when you came along?

DUZAN: Yeah. I actually was—my early—first ten years were spent on that ranch. And so I started riding a horse when I was four, and I was driving a tractor by the time I was ten. I went back every summer until I was seventeen, from Seattle, and spent the summers there at the ranch. So I was a ranching kid, and spent almost all of my time plotting how I would never have to be a rancher.

JONES: Really?

DUZAN: I was not interested. My brother was, but I wasn't the slightest bit interested. I wanted to head—*Life* magazine had convinced me there was more to life than you could find—

JONES: What did you have in mind? What did you want to do?

DUZAN: Well, I wanted to be a lawyer, and I actually studied in undergraduate school, I studied political science and history with the intention of going on to—and that was recommended by lawyers, and—

JONES: And that's at Dartmouth?

DUZAN: I started at Dartmouth, and then finished at the University of Washington, and then—

JONES: And going all the way across the country to Dartmouth, that's—

DUZAN: Yeah, and that was a mistake, really, for me, as I look back on it. I was not a very happy camper at Dartmouth. I didn't know a soul. I had no connection whatever with anyone back there. They came and got me. They were pushing for—to have a national student body. And so they came to the West Coast looking for kids. And I can't remember how it was that we came—

JONES: Were you a good student?

DUZAN: Yeah. I was. [Interruption] So I got a scholarship to go there, and I thought that was an interesting idea. So off I went. But in retrospect, I was a Western kid. It was an all boys' school, and as I said, I didn't know anyone. You were pretty isolated up there in those days. There were no freeways.

JONES: Well, still.

DUZAN: Well, it is now, but my God, now there are regular flights out of Burlington, Vermont, to cities all over the place, and freeways that connect it, and trains that run past.

JONES: Sure.

DUZAN: It was—used to be an eight-hour train ride to New York City, and four hours to Boston. So if you didn't know people, and didn't have a way to get away for—

JONES: Right.

DUZAN: —a holiday or something, you never got out of there. And I didn't care for it. So I switched back to the UW, which I did like tremendously, and had a lot of friends there. So I pursued my studies to try to become a lawyer there, and then went to law school, entered in 1963, and lasted about a year before it was clear to me that that wasn't what I was cut out to do. I would—I was not the detail guy that I needed to be to be a lawyer.

So in those days, you went—either went to go get an MBA, or you went to work in a management training program, and I did the latter. And went to work for a local manufacturing company in Seattle.

JONES: And you liked the city?

DUZAN: [Yes]. I love Seattle. Seattle was not anything like it is today in the 1960s. It was a—

JONES: It's still not a huge place.

DUZAN: Well, it's a big city.

JONES: It's a big city.

DUZAN: And it's very cosmopolitan now. And the food there is as good as any place in the United States that—the art and the culture are superb. There's every kind of thing that anyone could want there now. And wonderful suburbs, as well as a great inner city, a downtown that's lively, and goes all through the night. There's—really, Seattle is nothing like when I was a kid. It was a sleepy, backward, not very exciting place. But I—

JONES: Was the Navy there? Was that—

DUZAN: Well, no, the Navy—well, the Navy is all around there, but not specifically in Seattle. No, Boeing was the big employer.

JONES: Oh, yeah.

DUZAN: One of the great days in my life, as an aside, was when the market cap of Immunex was larger than the market cap of Boeing at one point.

JONES: Wow.

DUZAN: Having grown up in Seattle, that was a red-letter day for a Seattle kid, the company—

JONES: <T: 10 min> I would have never guessed that, that—

DUZAN: Well, Boeing got into some trouble, and they shrunk, and Immunex got over-capitalized, probably, for its status. But there were—there was about a two week period in there where our market cap was actually greater than theirs.

JONES: So you found your niche managing?

DUZAN: [Yes]. I did. I really liked business, and I liked the strategic side of business. I went to work for a company that was just getting started with some very early work in air pollution control. And so I—and I wound up in that department, and—at quite a young age, actually, because it was growing fairly rapidly. Became the assistant manager of that division, and then finally the manager of it. And I was not yet thirty-five.

JONES: So this is kind of a technology thing?

DUZAN: It was.

JONES: What did they have? What was—

DUZAN: Well, they did two or three things. They had a line of—they had created of what were called scrubbers that scrubbed fumes from smoke, and they were designed in those early stages for incineration, both municipal and large building or manufacturing plant incinerators. Incinerators were spewing out a lot of smog in those days, and—

JONES: So scrubbers is kind—something like a filter, or—

DUZAN: Well, it is. It gives the air a bath on the way out to the stack. It washes the particulate out of the air, and then releases the air to the environment. It would be today not considered a particularly strong technology, but in the 1960s, it was one of the better ways to get either industrial pollutants or the particulate matter that results from burning garbage, to get that out of the air.

JONES: Yeah. So where did you put these things?

DUZAN: Oh, all over the country.

JONES: Yeah?

DUZAN: We had them in—everywhere from New York City to Georgia and—quite a lot around Philadelphia, interestingly. There was—we had used manufacturer [inaudible] wherever we had a good sales team, we had good business.

But then we started becoming the construction arm for a number of European companies who made electrostatic precipitators, which are still in big use today. And all over the Western United States we began to install electrostatic precipitators on coal-fired power plants. And that became the big line of business. So it—that was interesting stuff.

In 1975—yeah, 1974, a group of local investor people came to me and said that they were about to buy a totally different business in Seattle, but they'd had their eye on me, they said, and wondered if I would be interested in going in as the CEO of that.

JONES: How old were you at this time? You were—

DUZAN: Thirty-four—thirty-four, thirty-three, thirty-four.

JONES: Still a young guy.

DUZAN: Yeah. Pretty young for the job I got. I thought I was ready for it. I probably wasn't. But I learned pretty fast. And this was a completely different kind of company. It was chemically based, and it made packaging, all kinds of plastic and resin-based packaging, everything from bread bags and things that food are done in to industrial wrappers for industrial products. So I ran that for five years, and we sold it to Arco in 1980.

JONES: How was it that these companies, both of them, how did they end up in—how did they come to be in Seattle?

DUZAN: They were founded by Seattle people.

JONES: Yeah?

DUZAN: Celo was started by three guys who were GIs who came out of World War II and got some funding and began the company. They'd been plotting it while they were in the service in the South Pacific. The manufacturing company that was involved in air pollution control was started by a Seattle guy who was quite a bit older. I mean, he would not have fought in World War II. He was older than that. He was in his sixties when I became involved, already, and it

was actually being run by a younger engineering guy who had come up through the ranks with the founder. And the founder had turned the running of the business over to him by the time I was involved.

JONES: [Yes]. Well, through this succession of positions here what's the substance of the work you're doing, and <T: 15 min> what kind of lessons are you learning along the way?

DUZAN: Well, I learned how to run a company, how to organize it, how to contain costs, how to position it for success. I think—I understood that. And I still understand that. I was unusual among the guys who got started in biotech, because I didn't come out of the pharmaceutical or the academic areas, and I had not been involved in biologic research in any way, shape, or form. I had taken some science classes at the UW, but nobody was talking about cloning anything when I was going to school.

JONES: Right.

DUZAN: So I came in with a—as a kind of a seat of the pants guy who ran businesses, and we were—Chris Henney and Steve Gillis were—[interruption]—we were introduced in 1980, and it was, sort of, serendipitous. When I was in the process of selling off the packaging company to Atlantic Richfield, one of the lawyers who was working on that, he was representing some of the investors in our business, asked me what I knew him, and he asked me what I was going to do when I got finished with this. I had six months to serve under Arco, but then I was free to go, probably would have been encouraged to go if I hadn't. But I was happy to do it.

JONES: So both of these prior companies are very successful. You're growing them up and—

DUZAN: They both—they became—yeah, they were very successful. The manufacturing company that I started with was ultimately liquidated. I was on its board for years and years after I left. And it was ultimately liquidated because of—its real estate became more valuable than the activities that were taking place on it.

JONES: Where was it located?

DUZAN: Well, it was located right on Harbor Island in the middle of the Port of Seattle, and the port needed it. And so they were willing to pay top dollar to consolidate what they were doing. So they—it was sold. They had other operations down in the south, at Fort Smith, Arkansas, and those were in what was becoming the Fort Smith, Arkansas industrial park

development or something, and they wanted those. So the families that owned it, and I had only a very minor interest, the ones who really had some interest in it decided they would sell it. It became basically a real estate group.

JONES: Yeah. How did you feel about that?

DUZAN: It was the best thing to do. They had not planned well for succession. The engineer who ran it when I was there was still running it by the time it was liquidated, and he was way past the time when he should have been running anything. And so it was the best thing to do. They got their fortunes out, and everybody left happy. I think otherwise it was going to come to the point where the heirs of these people were going to have an enormous fight over who was going to run—control this thing, because nobody was really in a position to control it without somebody else being involved.

JONES: Right.

DUZAN: Once it got split up. And they—they none of—not one child of those two men was involved in the business, and had a clue how to run it. And it really was the best thing to do.

JONES: [Yes]. And that was your recommendation at the time?

DUZAN: I was on the board. And actually, one other director and I were the ones who, sort of, created their scenario for liquidations. All of the plants went to China. They're I presume still operating over there. They were all torn apart—

JONES: What was the date?

DUZAN: Well, it was—let's see. I haven't thought about that for a long time. It was sometime in the mid-nineties, that the final things were shut down.

JONES: I guess—

DUZAN: Or maybe it began around 1990, '91.

JONES: Yeah. I know China hadn't really taken off by that—

DUZAN: Well, but—it had. There were—I mean, there was—these plants could be used for fundamental steel fabrication, and that's what they were sent there to do. I mean, the same equipment is used to make beams for—I beams for skyscrapers, that's used to make a pollution control plant. So that equipment went over there for that purpose. And one of the engineering guys that I knew quite well went with it for a period of time, and he came back raving about what was going on in China, the growth that was already occurring at that time.

JONES: [Yes]. So the other deals, are you involved in negotiating these sales?

DUZAN: Well, I didn't have anything to do with the direct negotiation of the sale of the <T: 20 min> manufacturing company, [inaudible] but I was on the board, and was involved in setting up the strategy by which it was sold. I directly negotiated the sale of the packaging company with Arco. I mean, I ran that negotiation. And then as I started to say, I was talking to one of these lawyers that was involved in that deal, and as we were wrapping it up, he said, “What are you going to do?” And I said—

JONES: This is a Seattle lawyer?

DUZAN: Yes, although the firm he was with operated more broadly. And he—anyway, I said to him, I don't know. I said, “Either find another business to buy, because I think the guys that bought this one would buy another one, or possibly buy—or possibly start a company. I've always been interested in starting a company.” We didn't say another word. I actually finished up my Arco stuff and went off and spent six or seven months helping a friend of mine straighten out the operations of his business. I'm always listed in things like prospectuses for Immunex as having worked for an ice machinery company, but I really was only—

JONES: Helping your friend?

DUZAN: —staying there—there was no intention that I would be there for a long time. But, you know, you have to have the cold, hard facts in the prospectus, so that's where—I'm always listed as having been in the ice machine business before Immunex.

I always thought that was sort of funny. A lot of people were taken aback a little by that. I think they envisioned ice cube dispensing machines, which, I mean, these were actually industrial machines that make ice that's put into concrete in hot climates, when they're making concrete. It's fairly sophisticated. If you go to Saudi Arabia, and as these guys did, with their

machines, they build giant runways or street—roads and so on, in horrendous temperatures. They do it around here. They mix ice in the concrete, so that it will cure more slowly. Because in hot temperatures, it—the evaporation occurs so rapidly that the concrete is—

JONES: It makes a crushed ice, or—

DUZAN: It's a—these things made a sheet of ice. It was not actually crushed. It was a thin sheet of ice maybe yea thick. It was a kind of a constant scraper inside a cylinder that would scrape that off. So it would be like that thick, broke—it looked like broken windowpane shards of glass. This was shards of ice.

JONES: Yeah.

DUZAN: And that's what—those kinds of chips went in. And they would provide a uniform curing in hot temperatures.

JONES: Well, I wonder who invented—that's a good idea. Great idea.

DUZAN: The guy that my friend bought the company from invented that. It was a nifty little business. But he didn't know how to run anything. So we spent some time getting his costs under control and [inaudible]. In any event, bringing the lawyer back in, in the meantime, he had run into a patent lawyer in Seattle, and the patent lawyer said, “You know, I've been approached by two guys from the Fred Hutchinson Cancer Center who've invented some cancer cures.” I remember the word cure being involved. I'm sure never, ever did that come out of the lips of Gillis or Henney, but it certainly had become the way that the—these lay people were translating it. And he said, “We're trying to figure out how they could turn it into a business, because they think biotech's interesting.” Quite by coincidence, I had been reading a lot of stuff about the creation of Genentech.

JONES: You had?

DUZAN: Yeah. I was very interested in it. Genentech was then two or three years old. So I got a call from my lawyer friend who said, “I've met this guy. Would you meet with these two scientists and just talk to them?” And I thought that would be interesting, if nothing else, just to hear what they were doing scientifically. So we met. We had actually a series of meetings in late '80 and early '81, and out of that, we agreed to start the company.

JONES: What were your impressions of these guys and the science and their ideas about turning it into a business?

DUZAN: In terms of business or the starting of a business, or anything having to do with a corporate activity, it—they were totally naïve. They were academic guys. Henney was from England, had been an academic all his life, and I don't think spent five minutes inside an American company. Steve Gillis was still very young, basically a postdoc, and had gotten his PhD only shortly before that, still in his late twenties. But absolutely brilliant. I mean, you knew the minute Gillis opened his mouth and began to talk that he had a gift. And I later came to understand how that—how important that gift is.

He could actually take this stuff they were working on and translate it into English for people in a very understandable way. You could see right away that the guy just <T: 25 min> had a tremendous ability to communicate, and not only that, but he had some—when I talked about creating business, and how—why I thought most—they were a little apprehensive about business in one sense, because they had heard most businesses fail. And I said, “Well, most businesses fail because they're not well-run. There are systems in place that assure that the plan gets executed, and that the money lasts, the capital that you raise lasts.”

So among those long discussions we had, I had some with them where I tried to tell them that it wouldn't work like the Fred Hutchinson Cancer Research Center. Maybe on—while you're sitting at the bench doing the actual nuts and bolts of the science, it won't seem any different to you or anybody else, but the environment in which you work will have to be different. It can't be—we can't have thirty PhD scientists running all over the place doing whatever they want to do. They've got to be focused into an activity. I think in a sense it was very good that I was naïve about their world and they were naïve about mine.

JONES: Yeah. Did—

DUZAN: Because I proposed things that later most other biotech firms said, “My God, how did you ever manage to pull that off?” Well, I pulled it off because I didn't know any better. And I had in Gillis a guy who could sort of see why I was doing what I was doing.

I'll give you an example. When we first began Immunex, I proposed that our scientific staff keep track of their work and report it to us much as a liar—a lawyer would—liar. A lawyer would report his hours to a billing department in the law firm. That we had—each project had a project number, and these guys were to work on it, and they would keep track of which project they worked on and how much involvement they had day by day.

And our guys bought it, because it would enable us to know where we were expanding our resources, how they were getting used, and we could measure that against our success. I

don't know of another scientific organization that I've ever heard of where scientists were responsible for keeping track of where they spent the money.

JONES: Right.

DUZAN: At the time. And where every scientific project from the beginning had a budget and was tracked monthly against budget to make sure that we were devoting the resources. We were perfectly free midyear, at any time, to change the budget. I said, "We'll do that, but we'll potentially borrow the funds for that change from some other place, because the funds are not infinite. We've got to keep them under control." So—

JONES: Well, let's go back to the beginning of this, when you're first talking about, having discussions about what—you know—

DUZAN: Yeah. Well, I discussed—a lot of the time I spent discussing how I thought any business that was going to success had to have controls, and that's really why I'm giving you that last bit, as an illustration.

They were extremely concerned that they would be left free to do their science. Their—they were concerned that investment people and people like me would start telling them how to do their science. And I told them that I didn't have any plans to come in and tell them how to do their science, only to tell them what it—or to work out with them the environment in which they would do their science, so that we had a chance for some success. And that they couldn't just put down what they were working on today, rushing off over here—and they bought all of that. They could see that if we could raise a billion dollars, to pick a number, that was only going to last a certain number of months, and that they would have to spend it well enough so that I could raise the second billion dollars, or—and so on.

And we had a lot of discussions about that. From the beginning, it was clear to me that the guy who would make that work was Gillis, and the guy who was going to strain and suffer under it was Henney. Henney had been a long—he was my age. We were exactly—born exactly the same year. He'd been in academia for a long time and was not used to the kind of thing I was talking about. While I think he always saw the wisdom of it, and always wanted it to happen that way, it was very difficult for him personally to stay within the confines of corporate operation. So as you know, Chris has moved around a bit in the business. He was with us for a while. Then he moved on and start—help start Corixa with George Rathmann.

JONES: Right.

DUZAN: And then ultimately went off and got involved in what became—

JONES: Dendreon. <T: 30 min>

DUZAN: —Dendreon.

JONES: Advanced Cell Therapy or something like that.

DUZAN: [Yes].

JONES: Initially.

DUZAN: [Yes].

JONES: Well, did you have a notion—this business is unlike—it must have been unlike any other that you—

DUZAN: Right. It was. But it was still—you know, I was much more alarmed at—when I analyzed what Genentech was trying to do, to read things like there hadn't been a fully integrated pharmaceutical company created in the United States since World War II. And yet our business plan was going to be to create a fully integrated pharmaceutical company. And I already knew of another of other companies that either were up and running or going to be, that had this in mid. And it seemed rather incredible that twenty-five new pharmaceutical companies were going to spring into existence, so I—

JONES: Is there a plan of—on paper that is—does one still exist?

DUZAN: Well, if it does, I don't have it. A lot of this stuff, a huge amount of this stuff, was sent to the Museum of History and Industry in Seattle. I still have the bound books from every offering we did. I have every prospectus that—they were bound into volumes every time we did any kind of a financing. So I've got sixteen volumes maybe of stuff from that. I have all the annual reports. I've got a lot of that stuff. But the planning side of it, when I left there, I didn't take it with me. What I took with me, in the things I just described, were my copies of those things. And I took them along because I thought it'd be interesting someday to sit down and read them, although I've never done it. But it's possible that those plans would still exist.

The initial business plan I wrote and took to Tom Cable of Cable & Howse in 1990—early '81. And he made some suggestions for some changes in it, but not on the basic strategy. And it—we had as our goal that we were going to create and discover drugs, and that ultimately we were going to manufacture and market them.

As the years unfolded, I have to say I became skeptical that anybody was going to do this.

JONES: Only a handful did.

DUZAN: Well, I think—when we did it, I believe we were the third. Amgen and Genentech had done it before us.

JONES: Yeah.

DUZAN: And a handful come along after that. There was three or four, maybe, that made it out in any kind of time. Henri Termeer's organization, and Biogen.

JONES: Right. [Yes].

DUZAN: And then it gets sort of fuzzy after that, I mean, because a lot of the marketing is done by other people, or in partnerships with other people, or in joint ventures with other people.

JONES: Right. Well, there were a couple of other Seattle companies, too. Did you keep track of them at all?

DUZAN: [Yes].

JONES: ZymoGenetics, Genetic Systems.

DUZAN: ZymoGenetics, I was privy to their existence before they existed, because I had—Tom Cable was also trying to become the venture capital guru behind that one.

JONES: Is he still around?

DUZAN: Yeah, Tom is up in San Juan Island. He spends the year up there. He just finished spearheading the project of building our first hospital on that little island, and it just opened in October. Yeah, he's—

JONES: Are the winters mild because of the—

DUZAN: Yeah, it's a—I mean, they have some cold weather. Tom, however, is not—he tried to come down to Arizona and spend time, but he's not a golfer, and he's not—you know, and if he was going to hike, he'd rather have rain falling on him than sunshine, because he doesn't like heat. So he and Barbara are happy up there. They're snug, and—they're a couple of bugs in a rug, I think. And they like that environment. I would not want to spend the whole year up there.

JONES: So he was involved with Immunex and also—

DUZAN: Zymo. And—

JONES: I should probably talk to him.

DUZAN: Well, you could. Sure. And I could help you do that.

JONES: Yeah. Please.

DUZAN: I'll give you the information.

JONES: Okay. Great.

DUZAN: As we leave here. Tom is a very smart guy. He wanted us to consider potentially putting those two things together, Zymo and Immunex. And I know that Henney in particular, but Gillis, too, weren't at all keen on that. They thought that that was just so totally foreign to what—they saw it basically as an expression company. At that point, the big deal was that they could <T: 35 min> express—

JONES: Right.

DUZAN: —proteins in yeast, as opposed to *E. coli* [*Escherichia coli*]. And so they were—

JONES: Did you have a yeast geneticist in—

DUZAN: Well, we did. We didn't when we began, but we did as soon as we got to the point that that was a useful thing. We did do several molecules in yeast. We did something—we did some in mammalian cells. We actually had pretty good expression.

I will also tell you that there was an attempt made just about that time for Immunex and Amgen to be combined into a single company.

JONES: Oh, way—

DUZAN: Before there was a company. I met with—neither one was a company yet. I met with George Rathmann. I can't remember now where—how that got started. But that was another one where we were potentially going to have an amalgamation of something before we began.

JONES: Do you know, I heard he tried to—he went to San Francisco and talked to Bill Rutter, too, about trying to start Amgen or—you know, so maybe—I wonder if this is before or after that?

DUZAN: I don't know. It was interesting. We were—[interruption]

DUZAN: We were two companies that ran in parallel for years, just as an aside. Our registration numbers for public offerings are one number apart. And I can't tell you now which had the lower of the two numbers. But we went publicly virtually the same day. We were on our road shows for public offerings at—IPOs, at the exact same day. And of course, we were bitter rivals in the CSF world.

So those two companies—it's interesting they finally did come together, because there were certainly plenty of times along the way when they were very closely wrapped up in each other. And I knew George well. I thought George was a great guy.

JONES: Did you meet him from that meeting?

DUZAN: Well, that's when I first met him. I got to know him a lot better through our days in the [inaudible].

JONES: Yeah. Yeah. What was the conversation, the initial conversation, about what you—

DUZAN: Well, you know, some—George had ideas for companies, but he didn't have science. Amgen was not at its inception a real strong scientific organization. And there are people who will say Amgen was never particularly a strong research organization. And I'm making no judgments. I don't know. But I've heard that by plenty of people. George was looking for things, and he was particularly interested in IL-2, things that he could promote as the projects of his company. And so I think that was his interest, to get his hands on the stuff that we were talking about as products for our company.

JONES: How did he know about—how early was this?

DUZAN: This was in 1981.

JONES: Okay. So you had just gotten started. What was the date that you—

DUZAN: Well, we incorporated and started everything in July of that year, I think. The conversations with George Rathmann would have occurred before that.

JONES: Oh.

DUZAN: And George knew about it because IL-2 was already being talked about quite a bit, and—

JONES: And he knew Gill—

DUZAN: —it was pretty clear that Gillis was the guy who knew what was happening with IL-2. We began with far less capital than any other company, as far as I know. We—I raised a

million dollars from an initial set of venture capitalists, and that was enough to build the initial facility that we occupied, in an old hardware—marine hardware warehouse building on the [inaudible] in Seattle that had just been rehabbed by a property developer.

JONES: So you used the money to put labs in and—

DUZAN: We put labs in, and very small offices. It was pretty spartan. It covered about—I think around 16,000 square feet was all we had. We hired about thirty people. And that was the initial startup crew that actually didn't going until the spring of '82, because it took us that long to build out labs and get going.

JONES: So what was going—had you hired anybody in that—in the—

DUZAN: Yeah, we did, and we hired—some of the people were folks already working for Henney and Gillis at the Hutch. I went to the Hutch early and said, “We're going—these guys want to come out of here. We need to—we need to make some arrangements if they're coming out, because you're entitled to something for what's gone on here. We believe that. But at the same time, we don't want some encumbrance down the road. So how are we going to do this?” So we made a deal.

JONES: Well, were there—there were discussions—was there any talk of them staying in—staying—

DUZAN: At the Hutch?

JONES: Yeah. And, you know, and <T: 40 min> have the company—because, [inaudible]—

DUZAN: From the beginning, the venture capitalists and I both said no, we're either—you're either full-time with the company or we're not doing this. And we're not—there's no split activities, no split loyalties. But the Hutch did allow them to start the science operations of Immunex within the Hutch for about six or eight months while things got built.

JONES: And what persuaded them to do that?

DUZAN: Well, we gave them some stock in the company, and—in return for their release of the intellectual property. And they were cooperative. I think they realized that this was going to go away, but—from there, physically, but that they'd like to stay involved with it, and there was a chance for that, so—

JONES: Yeah.

DUZAN: And that, as it worked out, Leukine and bone marrow transplant, all the early work of that was done in patients at the Hutch. And of course, the bone marrow transplant was essentially created at the Hutch to begin with. So there were a lot of relationships that went on for a long time. I was on the board of the Hutch for a number of years. One or two guys from the Hutch were on our scientific advisory board quite a number of years. So we had relationships back and forth.

JONES: So it was always good?

DUZAN: We got everybody—yeah. We got everybody extracted without—and the intellectual property extracted, and there was never any further complication or difficulty in that. And then I went to Nutley, New Jersey, and we—

JONES: To Roche?

DUZAN: And we put together the IL-2 deal with Roche. And I don't remember now how I had come in contact with them, but I had found two—the copies of two deals that had been done by other biotech firms, so I knew something of the terms that were being included in these deals.

JONES: So what deals were they?

DUZAN: Well, you know, I don't honestly remember. I wish I could tell you. And I don't know, of course, whatever happened to them, either, because you never really worried about the stuff that you didn't need anymore. But I did have a chance to read two of those, and I think they almost surely must have come from a venture capitalist, right? I mean, all that kind of stuff came from them.

JONES: [Yes]. Oh, by the way, who were the venture capitalists that—

DUZAN: Well, the ones who were backing us at that time were the Mayfield Fund, Cable & Howse, the venture capital arm of Diamond Shamrock.

JONES: Mayfield is Silicon Valley.

DUZAN: Yes. And I don't think that NEA was involved at the very outset. I think they came in in a second round. But they may have been in the very first round.

JONES: So—and this is new for you, getting venture money like this, or—

DUZAN: Yes.

JONES: Yeah?

DUZAN: Yeah. I had not done this before. I didn't find that particularly difficult. I thought venture capitalists were easy guys to deal with. I didn't ever have any big problems with them. I have to say that from—you know, we always had a problem. We were not in the Silicon Valley. We weren't part of the San Francisco circles.

JONES: Right. Right. Yeah.

DUZAN: And so we were always outsiders. That was just a fact of life. We kind of turned that to an internal advantage and used it as a way to spur people to work harder, that were going to prove to everybody down south that we were as good or better than the other guys. But we were not thought of as the best guys in the business down in Silicon Valley. And our science was always not as good as somebody else's in the beginning. But we did get investment—investors from there. I'm trying to remember Jeff Pickard's firm, and I don't remember the name of the firm. But you know Jeff Pickard, the name of the company—

JONES: No, I don't—

DUZAN: It's a good-sized firm, and I'm just remiss in not being able to think of it. Anyway, we had I think five or so of those guys.

JONES: And they went on the board?

DUZAN: Well, Glenn—gosh, what was Glenn's last name? Mueller, who later committed suicide, five or six years after this happened. Just a tragedy that touched everybody in Silicon Valley. Glenn was on the board. Tom Cable was on the board. Oh, and—and then Dick Kramlich came on the board.

JONES: From NEA?

DUZAN: Fairly early in this game. And I think they were the only three that were on the board. I'd be fairly sure that that's right. There were six directors, and three of them were venture capitalists. And the company was fairly evenly split, 50/50, at that point. <T: 45 min> The second round of funds that we raised produced another two or three million dollars, allowed us to expand the facilities. We were only private for another eight months or so after that, and then we went public in 1983.

And raised enough money to really get going. And by that time, we had the deal with Roche done. We had a deal with Hoechst and Behringwerke in Germany to do some work on CSF. And we were beginning to put together some other deals besides. We may have had another one done, but I don't remember exact timing.

JONES: And going public as—had you taken a company public before?

DUZAN: That was new, too. Yeah. An interesting process, and one that I really enjoyed. I liked—for the first few years, I liked being a public company, even though the market for biotech stocks was just goofy. One company would do something wonderful—

JONES: Right. Yeah.

DUZAN: —and boom, the stocks would soar. Another company would miss its deadline that some analyst that didn't know anything had said would be made, and every stock would plunge. And this went on for years. So once you got used to that roller coaster, I thought being a publicly traded company was kind of cool. It creates a lot of attention for what you're doing. And then IL-2 was a big story, you know, nationally.

JONES: Yeah.

DUZAN: Cover story for *Fortune* magazine, and the Immunex-Cetus battle over that was an interesting story within biotech. And—

JONES: Well, say some more about that.

DUZAN: Well, you know, I never was privy, of course, to what—how decisions got made inside of Cetus, but they weren't involved in IL-2 when we began, and began work on it. They got into it at a later time.

JONES: Did they?

DUZAN: Well, they may have had it on their list, but they weren't doing any research that anybody knew anything about. There had been no great publications coming out of Cetus on IL-2. Ultimately, the cloning of it was a goofy thing, too. It was done in Japan by a researcher who was being funded by a Japanese pharmaceutical company. And Henney and Gillis had given them some reagents, IL-2 reagents, before Immunex was created, which were for experimental purposes, but specifically, it was prohibited that they would be used for cloning. He used them for cloning.

Ultimately, they got the patent, but the patent ultimately got reassigned back to us, and then in the end, of course, IL-2 was a bust. And so it didn't matter so much who wound up winning the war. Cetus marketed it a bit, and Roche marketed it a bit, and it's still sold today, I'm told, but only for malignant melanoma, and only as a kind of a last case therapy. But it was a—I will honestly say I thought Cetus was the hype-iest organization in business that I had ever encountered in my life. We had a *New Yorker* cartoon that appeared—showed some guys pouring some illusive material in one end of a—in a hopper at one end of a machine, and at the other end there was something coming out. And I don't remember what the two words were that were on the hopper and on the spout. But we changed them to hype—and ultra-hype. [Laughter]

JONES: Yeah.

DUZAN: And then the guys all had Cetus on the back of their lab coats, in our version of the cartoon. Because—

JONES: Were you involved with Ron Cape and—

DUZAN: No.

JONES: —the IBA [inaudible]?

DUZAN: Well, Ron was around, but it was already—Bob Fildes was emerging as the guy.

JONES: Yeah. Right. Yeah.

DUZAN: And so I—as far as I was concerned, when—in my relationships with them, Cetus was really Bob Fildes, because he was the public side of it at that point. Ron Cape was more of a distinguished scientist that waved his hands over the—whatever was going on there.

JONES: But he was the guy who did this—the trade association stuff, right?

DUZAN: He was involved with it, along with Bob Swanson, and George Rathmann was very early involved in it. I can't claim that we were. We were a year or so later than the others. It was an interesting—IBA was an interesting thing. It—

JONES: Well, before we talk about IBA, I just wanted to finish up with the origins of the company. And when—nobody really had an idea of how much money it would take to—what—when you put the plan together, <T: 50 min> did you have a notion of—

DUZAN: No.

JONES: —when—no?

DUZAN: No. We had some dates established when some things would happen, and those proved to be really wrong, because nobody that we had in our company, and I think this was pretty much true through the whole industry, really knew anything about the FDA and how much greater an amount of time it was going to take to get to the first human being with stuff, much less to get through the trials, because everybody beyond the biotech world, which was very enthusiastic, everybody else was pretty skeptical and concerned.

And so whatever dates we had in initial business plans and initial prospectuses kept getting shoved and shoved and shoved, but it was happening for the whole industry, so it wasn't absolutely killing the individual companies. There were already companies that were coming and going. Some of them didn't last very long. Most of them didn't last. A few of them were lucky enough to have something saleable when the shoe dropped. But the original group of companies that I sort of lump everybody that got started in the first four or five years together, that initial group of companies kept getting smaller and smaller as time went by, and more and more attention got focused on the products of a handful that really—that was the biotech story of—around the country.

The other thing that I had not banked on, that I—and this is probably where my lack of experience with pharmaceutical companies was an issue, I did not understand that it would be so difficult to begin manufacturing this stuff. And to some extent, I can thank Chris and Steve for furthering my naïveté, because they didn't understand, either.

JONES: They didn't know it, either. Yeah. [Laughter]

DUZAN: And they assured me right from the beginning, that was nothing. That was be just—that would be no problem at all. [Laughter] So, I mean, that was tough to do. And it took a lot of money, and it took a lot of time to get to the point where you had drugs that you could give to people. We could give a lot of stuff to mice and monkeys, but we just couldn't give it to people for the longest darned time. We found that our partners in all cases were not doing what they were supposed to do.

JONES: Really?

DUZAN: They were very slow to move. We would think we'd arrived at a certain place in the process, and they would absolutely insist that we weren't there yet, and nobody was going to try this in a human being for two more years, and we were going to be running these experiments, and we were going to do this and do that. Everything was slow. The worst were the Germans, the Behringwerke guys. I think that at the beginning of the CSF stuff, we had a big lead. We had GM-CSF cloned way back early. But it just lingered and lingered and lingered, while the Germans were supposed to do work on its scale up and purification. And nothing happened.

And right to the point where it ultimately got marketed, they fought us every step of the way. And it wasn't until I basically walked in and threatened to sue them for non-performance that we were given the marketing rights and allowed to go ahead in the US and do what we called the backyard moonshot. Did Gillis talk about the—

JONES: No.

DUZAN: Henney was out of the business by then, but Gillis is a funny guy, and we suddenly saw a route through the FDA with GM-CSF that would allow us just to seek a narrow approval for bone marrow, that we had some potentially approvable data that had been analyzed by statisticians at the Hutch, and they thought it was approvable, that it was statistically significant.

JONES: Yeah.

DUZAN: And so we decided to take this narrow little thing and try to get an early jump on the CSF market. And that was called the backyard moonshot. And we didn't have a manufacturing plant at that point. We didn't have—that could be licensed. And we wound up building it inside our lab.

JONES: I guess you just need little bits of—probably all you can produce is—

DUZAN: Well, we had enough room in one part of our building. By then, we'd great expanded in terms of square footage. We had enough space to put in a couple of units and start making material. And <T: 55 min> so we did, and we ran some more clinicals as fast as we could run them, and we were beginning—and we went ahead and started to file our request for approval from the FDA quite quickly after I got the rights cleared up with Behringwerke, and we were allowed to go ahead.

JONES: Initially, the deal you had with them was that they were going to—

DUZAN: They were going to market it. They were going to market it, and we were going to not market it. There was a provision beyond that for any follow-on products that—where we would become marketers. This was supposed to be staged in various steps.

JONES: So—right. And who was paying for this?

DUZAN: They were paying for that, and we were—they were paying for the research on GM-CSF. But we would be expected to step in and pay for—if we were going to co-market, to pay for development. So that—we all—the only way we could get any kind of co-marketing rights or—was to be a co-developer. And so we knew that was coming.

JONES: And that's a big investment, right?

DUZAN: Yes, it was a big investment. And it happened much more actually with products that we originally uncovered working with Kodak. I don't know if you knew that we did a deal with—

JONES: No. Maybe I did—

DUZAN: Kodak wanted to get into the pharmaceutical business, and they had decided that this giant inventory of chemicals they'd synthesized over the years might have therapeutic value. We had gobs of different assays that would allow us to look for chemicals that mimicked the activity of a particular cytokine or its receptor. And so we did a deal where we agreed to screen those chemicals, and to look for drugs that way. And then they wanted to get into biotech. So we let them fund a series of later interleukins and their receptors, one of which was ultimately TNF and TNF receptor, and that became—

JONES: Enbrel.

DUZAN: —Enbrel. And they bought Sterling Drug. I don't know if that's part of what you've come across. But in the middle of this, they bought Sterling Drug, and then they hired a guy from Volkswagen to run it. The most amazingly inept company that I've ever been around. And they—it was almost like they calculated to see how dreadfully they could do some of this stuff.

And finally, internally, they—all interest in pharmaceuticals died. And so I went in and negotiated the return of all of those things to Immunex for next to nothing. They'd invested a lot of money in it, but without us, it had nowhere to go. And so back came, among other things, Enbrel. Well, we didn't know it yet. And then I did a deal called Receptech. One of the favorite ways of funding biotech, although we had never used it, was the research and development partnership. And as a result of the tax code change, basically, those were wiped out. And so we've created something that replaced it. It was an actual corporation, and we transferred certain molecules into the corporation. We set it up for a—did a separate IPO, but ultimately, we had the right to buy it back, either for stock or cash. And we did the research under contract from it. So it paid us to do the research on the molecules. And it was a separate play on just that batch of products.

JONES: Right. [Yes].

DUZAN: And so it worked very much like an R&D partnership. It didn't have a tax benefit, but it got around the tax—the punitive side of what they've done to try to eliminate some of this tax benefit of partnerships. And it actually worked very well. Ultimately, we bought it back for stock, and the people who bought Receptech stock and then held it made a lot of money.

And then I suppose the final deal to touch on very quickly would be the one that was done at the end of my tenure with American Cyanamid. It's always misunderstood. It was understood I think fairly when it was done by people. It was named the best deal in the industry for 1993 by Steve Burrill and—at his Laguna Miguel meeting. What we did was acquire Sterling Drugs—or not Sterling Drugs—American Cyanamid's Lederle cancer product portfolio, <T: 60 min> in return for—giving stock in our company, which gave them a 51 percent ownership of Immunex, but with a governance agreement in place that effectively kept them from doing much of anything to run it.

And until—ultimately, the thing that ruined that whole scheme was that the fen-phen deal at American Home Products, who had by that time acquired American Cyanamid, became such a horrible liability that they had to raise cash. And that's what put Immunex in play, and that's why it became part of Amgen. But at that point, it was a very valuable company. And that merger between Amgen and Immunex was one of the top five or six in terms of value in the history of the pharmaceutical industry at the time it happened. I'm sure it's slipped way down now because of the values of things [inaudible], but—

JONES: Sure. Yeah.

DUZAN: And so then at the end of getting that deal done, I announced on my own, as we started negotiating the deal, that if we do this, and we're successful, and then it's time for a pharmaceutical guy to run Immunex, and I'm out.

JONES: That's because of the size, the—

DUZAN: Well, the size and the complexity and the fact that marketing was now the key thing we had to do. And I was not a pharmaceutical marketing guy and knew nothing about it.

JONES: Well, you had started off this thing without knowing a lot about—

DUZAN: I know, but this—

JONES: —this kind of finance and this—you know, the—

DUZAN: But I realized there are limits to how far you can go without ever having done any of this stuff, and I just felt like we would never achieve anything on the marketing side particularly, but manufacturing—all aspects of it, until somebody skilled in the general management of pharmaceutical operations was involved there. Plus, I was exhausted. I had not only done that, but I'd done the IBA at the same time, and I was tired. So—and plus, I could see the years going by when I wouldn't be able to get my golf game where I wanted it, to—

JONES: That was a [inaudible]—

DUZAN: I put it all together and decided I was going to take a few years off.

JONES: Did you take a few years off?

DUZAN: I did. I stayed on some boards, and most of them biotech related. But I got—in the main, I've been involved in nonprofit stuff since those days. And not on any kind of paid basis. I've done my work and enjoyed it, but only as an outside guy who comes in and helps do that stuff. The IBA, just to give you that background—

JONES: Yeah. Yeah.

DUZAN: —the IBA was a struggling organization from the beginning, and it always struggled. There was such internal contradiction and conflict in IBA that it's amazing that it made it at all. You first of all had these upstart pipsqueak companies, versus big, established pharmaceutical companies. Both of them are members, both of them on some basis believe that they have—or at least the pipsqueaks believe they have equal standing with the big guys. The big guys think we're all a bunch of idiots. We think the big guys are entirely capable of ruining the industry, because they just don't understand what's happening.

Then on a second level, you have—there's a kind of—almost a caste system within the biotech companies. And then you have the split between the ag side and the medical side, and even the medical side has more than one facet to it. It wasn't very long after the IBA came into being that a lawyer created something called the ABC, the American Biotechnology Congress or something.

JONES: Yeah. [Yes].

DUZAN: And so we had effectively two different voices. And it went after the smallest of the companies. It had scads of members. It had law firms and patent lawyers and all kinds of stuff that belonged to it that really weren't in the industry at all.

But what was amazing was that it would—very often, the two would take contradictory positions before Congress or all over the place, in the States as well as at the federal level. It was a—we really had a trade association nightmare on our hands. We had as good an executive as we could afford, and in fact, maybe he was better than we deserved, in the early days, in Dick Godown, a fine, fine man. But he also was in over his head in trying to build this thing, given all of this attachment.

It was all hung up over bovine somatotropin, which was kind of the poster child for conflict in the country over biotech. And <T: 65 min> I can't tell you how many biotech meetings or BIO—IBA meetings, board meetings, were just consumed by dealing with that single product, when all this other stuff existed out there that needed to be addressed, not the least of which was this ABC was running around saying things like, well, you know, BST ought to be banned. [Laughter]

You know, it was just—it was just horrible. So several attempts had been made to try to figure out some way to get this—and it wouldn't work. And I became chairman I think in '91, and—it might have been '90. And Roger Salquist was the vice chairman. And I said, “Roger, we've got to see if we can't solve some of this, somehow.” And I knew that when I came here today, I was never going to think of his name. There was a young man whose name I should remember, and I don't, who was the head of the ABC at that time. He ran a biotech company. And he was a nice young guy. I had known him from Laguna Miguel, because both kinds of companies came to that. And I liked him.

So I got him to agree to meet with me, and we held two or three meetings, and I kept proposing a structure that would allow these smaller companies who were worried about their voice to have a small business segment within—and yet we'd have a bigger overall thing. We'd create a board where they would have equal representation at the beginning. And let me tell you, Monsanto didn't think those companies ought to even be at the table with them. This was not universally liked as an idea. But it had to happen. We had to solve that problem.

And over time, I persuaded him, and he went to work to persuade his side that it needed to happen. And one day in Washington, DC, we sat down, and with a legal pad I wrote out the agreement for the creation of BIO. And he and I signed it as a letter of intent, handwritten, no lawyers, nobody else there. I wish I'd kept that piece of paper. I don't know where it went.

And I took it back to the IBA, and there was, of course, some things people wanted to change on our side. And—and the ABC began to talk about the things they wanted to change on their side. So I got together with my guy again, and I said, “Let's just go back and say no changes. This is going to happen this way, and then the boards can sort it out. The board can sort it out over time. But let's just make this happen.”

And so we had a meeting of the IBA board, at which I announced that whoever uttered the words BST or the initials at least BST at any time during the meeting had to buy dinner and drinks for everybody at the end of the meeting. And that certain other subjects could not be discussed under any circumstances today. And we sat down and went through it. And at the end of the meeting, much to my amazement, they voted to accept it. And we had to wait for the ABC. But they got it done, and in one fell swoop, we created BIO. I went and hired Carl Feldbaum, which I thought was a miracle, that we got him, because I think he's—

JONES: Was he coming out of Arlen Specter's office at that time?

DUZAN: He was. He was Arlen Specter's AA.

JONES: So how did you get him?

DUZAN: Through a headhunter. I got a headhunter to launch a search for us and had gotten the board to—we assessed everybody for enough money to provide—we couldn't tell Dick Godown what we were doing at that stage. We did have to provide for Dick Godown and his retirement and so on. All of those issues had to be resolved, because he'd done a good job for us. It was just that the—there was a limitation to what he could do for us. And he had a very ill wife, and I didn't want him dumped at the end of this thing. That would have been a tragedy. There were people who wanted to just fire him. Throw him out. And so—but Dick stayed on I think a year or two under Feldbaum as a—kind of a deputy, and it worked out well.

Carl came in as one of a handful of people to interview, and I knew the minute that he came in, I heard about his background, and the family that he had come from, that Carl was our guy, that we had to get him, and we did. And then I left the board of IBA, or—I mean, I went—IBA ceased to exist. We had to give up—under the new thing there were a certain number of directors from each. We had to lose two or three people. I said, “I'll be one of them.” And so I went from chairman of IBA to not even involved in one swoop.

I was—what's his name, Kirk Raab that ran Genentech became the first chairman of BIO. He liked to say he was the first chairman of BIO, but that's actually incorrect. I, for about an hour or two <T: 70 min> was chairman of BIO, while we set it up and created it. [Laughter] And then Kirk took over as the chairman, and I—that was my last meeting.

JONES: Right. Who were you working with closely in getting all this—or did you have to work—were the people working against you, that you had to work—

DUZAN: Well, there were plenty of people working against me. Several big company people and a couple of larger biotech firms really didn't want to do this. I should say that they acknowledged the problem existed, and that something had to be done. I don't know whether they wanted us to shoot everybody that belonged to the ABC or what they wanted to do. It had to be resolved, and we had to get rid of Godown. Those two things had to happen. But when it came down to a solution that would actually make those things happen, it was very hard to get them to embrace any idea.

But Roger brought Monsanto and some others behind us, and I got a representative from Merck and a couple of others to agree to go back and then they came back and said they would do it. But I will tell you that this was for a good part of it a two man deal for the ABC guy and I together. We'd go back to our respective organizations and, kind of, lay it out on the table. And I wasn't trying to build coalitions as much as I was saying, "Here it is. Do you want a solution to these problems or don't you want a solution to these problems?"

And ultimately, I think everybody saw that while this may not be perfect, it would do the deal. And of course, it's become a fabulously successful thing, because once you got everybody in the same room and working on the same page, it did just what you thought it would do. It made such sense that it worked—and Carl of course was a good piece of that.

JONES: And now twenty-thousand people show up for the convention. [Yes].

DUZAN: [Yes].

JONES: Yeah.

DUZAN: I've been a bit surprised that I've never, ever received a thing from them, not an invitation to a meeting, not a—

JONES: Really?

DUZAN: No. I've always wondered about that. You know, I disappeared at the moment it was created. But I was in some respects the father of that deal, because I set out to make it happen. And I never got a letter thanking me. I never—you know, usually, when you retire as chairman of something, they give you a cup or a—nothing like that ever happened. And of course, it was because a new thing got created, and the people who are supposed to look after that didn't realize that—I mean, they were new. They were trying to get into their situation. But I was surprised always over the years that nobody ever thought of that.

JONES: [Yes]. Well, maybe they'll—

DUZAN: One of my regrets.

JONES: —maybe it's not too late.

DUZAN: Oh, I don't—I suspect now—not even Carl's there anymore, so . . .

JONES: Well, you mentioned you were tired by the time you—and you wanted to move on to Immunex. You—this is consuming, doing this kind of work, and then—what's—at Immunex, what kind of demands were there on your time?

DUZAN: Well—

JONES: You had your family?

DUZAN: Yes. Although I, like about half the guys that were CEOs in biotech, I wound up divorced during all of this. Remarried reasonably quickly to a wonderful lady to whom I'm still married, and we've had a wonderful life. My daughters, I don't think they were deprived, but I was gone a lot. I traveled constantly. And being in Seattle, being on the West Coast, but particularly being in Seattle, was—made it more difficult. The Seattle sports teams moan and groan about how much travel they have to do. But let me tell you, the guys that are trying to be publicly traded, and totally dependent for their existence on the stock market, and—going to New York was almost a weekly event. And there were many times when I would fly to New York, spend one day, and fly home that night.

JONES: And did your role change over time? Initially, you're an operations guy, right? Trying to put it together, and—

DUZAN: Right. And it did change a lot.

JONES: Yeah?

DUZAN: I think I was, at the end, what I was primarily was a negotiator and a guy who reviewed the work of the senior guys who were running the individual areas of the company. I did—I certainly did strategic thinking for the company. I mean, the buyback of Kodak stuff and the Behringwerke joint marketing deal, when those things—not only did I go and negotiate those, but I really crated those ideas. Those were mine.

But <T: 75 min> increasingly, the CFO or the COO or the chief science officer were running their areas, and they were trained in how we wanted to do it, and they were very good at what they did. [Interruption] So, no, my role had changed a lot. I had gone from being a very hands on day to day operator of a small little business to a guy who ran a—was running a business as a CEO should run a business, not running anything much on an individual day to day basis, but running everything through other people. [Interruption]

Delegation was a good thing. I have to—going back to my days as a young trainee in a manufacturing business in Seattle, that engineer that I mentioned I've always said was the guy I learned as much from about running a business as any other man. And I mostly learned it from him by negative example. I would have to say that—and I would never want his name used in any of this.

JONES: Sure. Sure.

DUZAN: Because he was a fine man. But he was not a fine CEO. And among the things that he never did that created the great problem at the end was to have a succession plan or have a way to get him out and somebody else in to run the business.

And so I swore as Immunex progressed that the day was going to come when I would know how to extract myself completely from the business and turn it over to other people to run, and make sure that happened in a nice, fluid, easy way. But I wasn't going to be one of these guys who won't get out of the room. And it was one of the negative examples that really impacted me.

And I, in part, too, because I had stayed on that board all those years as an outside director and watched it from that viewpoint for a long time. It was not attractive. And so I made up a plan that if I could get Immunex to the point where I was sure that there was funding for the next stage of product development, the Enbrels and other stuff, that would be the right time to have a CEO guy come in. And we were lucky enough to get Fritzky, who I think did a marvelous job. And I was a consultant to the company for three years, but I was out otherwise. And it worked perfectly. We did not have a single glitch from that standpoint.

JONES: Yeah. How were things along the way with Chris Henney and Steve Gillis?

DUZAN: Well, I adore Steve Gillis, and he and I had minds that were sufficiently alike in a number of ways that we really got along well. We traveled well together. We rarely had disagreements. When we did, we could resolve them without screaming and shouting. Chris Henney and I did not get along very well. I have to tell you that I admired his mind as much as any mind I've ever come in contact with. Chris Henney is an absolutely brilliant guy. And there's not a doubt in my mind that had he not been present at the birth of Immunex, that things would have worked out as well as they did. He had to be there, because he really did—he had this kind of worldly vision of the research we were going to get engaged in, and we needed that, in addition to all these nuts and bolts and other stuff I was concerned with. We needed this kind of brilliant oversight that he provided.

He then chafed a great deal in all of this, because he wasn't accustomed to business organizations. He wasn't accustomed to going out into the big wide world with the CEO and discovering that people wanted to talk to the CEO, not him, and that they thought the CEO was the company, not him. Those were great problems for Chris. And so there is just no doubt in my mind that his kind of brain power is really important to things like an Immunex. It's just too bad that he—you know, he just wasn't capable of immersing himself in the organization, too, because who knows what he might have done, if he could do both of those things.

JONES: Do you—were—

DUZAN: But Steve was running the science almost from day one.

JONES: Yeah. Were—do you—were there any problems at any point with different strategic <T: 80 min> visions for where the company should go?

DUZAN: Yeah, I think occasionally.

JONES: Yeah?

DUZAN: But those were rarely the problem. The real problem was just the clash of cultures that we came from. And Chris was not—I mean, he wasn't raised in the US. He certainly wasn't raised around cattle ranch kids who are just sort of pragmatists that want to get something done today. And—and not—the organization means everything to us, because we see how that makes it happen. That wasn't Chris's thinking at all. He came from a totally different world. And so there was—I think that clash was inevitable. I will hand it to him. He was important to us. And he was important I think to the subsequent organizations he was in, although I think ultimately exactly the same circumstances emerged at other places. Well, I know they did at one of them.

JONES: Yeah. Yeah. Well, Immunex, I guess. the culture had took on a life of its own—

DUZAN: Yes.

JONES: —and people remember it, and have you been back and involved in [inaudible]—

DUZAN: Yeah, I have, and I'm at least a financial contributor to this ongoing—people were taken with our philanthropy as a company and they've continued it. The employees have a foundation that's doing a tremendous amount in the Seattle area.

JONES: I see. Is it medical stuff, or just all—

DUZAN: No, it's—

JONES: —immunity things?

DUZAN: —far more sustainability of our society.

JONES: Oh, okay.

DUZAN: And a little of it's *woo woo woo*, maybe, but I think it's been a wonderful way for a lot of them to kind of hang together. Yeah. Steve might have told you a lot about the Immunex—[Interruption]—Immunex was a great place to be. I do not know how anyone could have possibly been through that process for a few years and not have been touched as a—I mean, your—it altered your DNA a little bit.

JONES: So it was different for you than the other companies that you had, you know, I mean, you'd been deeply involved in those, too, right?

DUZAN: Yeah. Right. But there was no—I never had any experience like this in anything that I'd been involved in. I mean, people genuinely believed that they were on an important mission. The company was very valuable to society and was doing good things. And people felt good about the work they were doing.

At the same time, I've alluded to the fact that we felt a little bit like the Rodney Dangerfields of big-time biotech, because we were up in Seattle, and nobody took us particularly seriously for a long, long time. And every time there was a competition between us and somebody else, it was just, sort of, assumed by the rest of the world that the somebody else was going to win the competition. Yet I thought the science we were doing by several measures was the best science being done by anybody. I think there are a lot of people from other companies who would say that Immunex's science was as good as anything that was out there at that time.

So this us against them created a kind of cohesiveness, and we actually used that to our advantage, with this Immunoid business, the Immunoids against the world. And we did a lot of things to try to foster it. We had Friday night happy hours, which were not unique to us, but I think the happy hours as they unfolded were unique to anywhere, particularly the one at Halloween. That was—people came dressed and spent the whole day in costume, and the costumes became ever more elaborate. And the Halloween party was happening. It was unbelievable.

JONES: And how about operating in the city? You're always in Seattle?

DUZAN: Right downtown.

JONES: It was—was Seattle good? They were business friendly, science friendly? Did—

DUZAN: No, I had a lot of fights with Seattle. And there were plenty of times when I threatened to move to [inaudible]. And we had a plant out there—we had a plant out there. But I—maybe more than anybody else, I was absolutely convinced that an urban environment would allow us to recruit better people, that scientists of the kind we were after, we were not after established Nobel contenders. We were after the youngest, brightest guys we could find in the world in the fields that we were interested in.

JONES: And did that come from Steve Gillis and Chris Henney? Was that their notion of how to do it? To get—

DUZAN: Yes.

JONES: —the best postdocs, so to speak?

DUZAN: Yeah, guys right out of post—yes. I mean, we—from the opening bell, they said, “That’s the guys <T: 85 min> we should target, the brightest minds that we know we can find in the different disciplines that we’re interested in, and we should bring them in right away, right out of their postdoc program.” And I became convinced, as—the more of them I met, that having them right in the middle of downtown was going to be the place that would be attractive to them. And we were right by the Pike Place Market. There are fifty funky beer taverns within four miles, three miles in any direction except towards the water. And so it really—I think it helped foster that culture. No question about it.

And then Gillis created the team approach to research that we used, which I did not know of another place using. We didn’t have Sam’s lab and Joe’s lab, and they did their—everything in their lab that they wanted to do. We had the IL-2 project, and people were assigned to it, and there was a team leader, and you were part of that team. And it was interdisciplinary. You did not have a project that was your sole thing to work on. You might be the only guy working on a particular project at any point in time, because that’s where the work needed to get done, but it wasn’t your project.

And so that team approach I think paid enormous dividends. We designed our facilities to try to facilitate that. We created little niches where people passing might just go over and sit down, and we put whiteboards there, so they could write on them.

JONES: And that worked? People used those spaces the way—

DUZAN: It did. Oh, it did. You bet it did. We had them on the landings of stairs. I’d always seen people stop on the landings of stairs and talk. So we put whiteboards on the landings of the stairs. And people stopped and talked. And then pretty soon they—it’s natural to a scientist to go over and pick up that pen and start—

JONES: Right.

DUZAN: —scribbling on the board. That team approach was—you cannot underestimate how important that was to us. It—and I believe it was reasonably unique.

JONES: [Yes].

DUZAN: To us.

JONES: Well, one other thing I want to ask about is to be in this business at that time—well, still, it almost inevitably entails intellectual property disputes. And I got a call from a guy in Boston who said—who was involved with Alex Rich at MIT, and I haven't talked to them yet, but there was something there with IL-2. Was there a case?

DUZAN: There is a case in IL-2, because there was a—I don't know whether this was ever a lawsuit, but there was a longstanding dispute over the patent to IL-2, because of the use of materials and technology that would have been given to the Japanese for one purpose, and then it was used for a different one, and the clone resulted from that. And then of course there was also a patent between Cetus—the dispute between Cetus and the rest of us, which—the rest of us being the Japanese, Immunex, and Roche.

JONES: And now it comes to me. It was IL-1, actually, that these guys were working on. Did—

DUZAN: Now that one I just don't remember, but it's—oh, wait, yeah, no, there was a suit. And yeah. Man. It's funny how—you know, this is thirty years ago, so—and I'm seventy-two. Let me tell you, your memory begins to lose it. But there was a case where a guy claimed that we had used something of us. I don't remember what it. Or we had seen a paper of his. I can't remember the exact details. But yes, I remember being deposed for that case, even though I knew virtually nothing about it.

JONES: And what about—was Amgen—it seemed like Amgen was always—

DUZAN: You know, but I don't think we ever had a—

JONES: No, you—

DUZAN: —dispute with them, because their CSF molecule was a different molecule than ours.

JONES: Oh, they—you were doing GM and they were going—

DUZAN: And they were doing GE. And aside from that, we didn't really have any product fights, per se. There were other instances that I can remember where we were very unsure of ourselves with respect to our right to a patent in some areas, because of—we knew other stuff

had been going on. But those tended to resolve themselves. We didn't have hardly any lawsuits, period.

JONES: Oh, that's—

DUZAN: We used to get sued for shareholder lawsuits all the time, because our stock would go plunging. Some—there was one—

JONES: And that was—

DUZAN: —guy in Seattle who just loved to go—being a lawyer, he loved to go fishing in our files to try to <T: 90 min> find something that he could—and, I mean—

JONES: And that's an aggravation for you—

DUZAN: Oh—

JONES: —and more than Steve Gillis or anything [inaudible]—

DUZAN: Oh, yeah. Absolutely.

JONES: That's all on you.

DUZAN: You bet. And what a system, where, I mean, they really haven't any idea—I once got a—this guy sued everybody, and I got a summons and complaint. Our stock had fallen, and we were accused of having withheld the information that the investors would have needed to avoid this. And the summons and complaint had, on several pages, Nordstrom's name instead of Immunex's. [Laughter] They hadn't completely scrubbed it. So they were alleging the same facts exactly in these two different cases. But we were lucky.

In Seattle—I say lucky, in a negative way. We had a federal judge who used to let most of this stuff go to trial, or at least it was headed for trial, because he was an ex-defendant—or, I mean, plaintiffs' lawyer who had done similar kinds of stuff. I mean, he was just terrible. This stuff was—he'd always say, “Oh, no, you can take that issue to trial.” And so we'd settle. And we did it three times.

JONES: Wow.

DUZAN: But other than that, we didn't have too many. We did sue Behringwerke.

JONES: Oh, you did, actually?

DUZAN: Yeah, we sued them.

JONES: After you got the—

DUZAN: After the drug got approved, for their failure to do their—

JONES: Oh, they weren't marketing it?

DUZAN: They weren't—they were not marketing it on their side. We were marketing. They were not marketing. They were screwing up our marketing. And they—we were having a real problem with that.

JONES: Yeah.

DUZAN: Very, very funny organization in the US. I was impressed with Hoechst in Germany. I thought that was a quality operation. But their New Jersey thing, they used to sell these dumpy drugs, and it was not the first team in there selling anything. And that was all they had, really, in the US, was a sales operation. They didn't have anything else. And these guys got GM-CSF. They'd never had anything even remotely like it. Couldn't even imagine that it would be useful. And so they spent most of their time trying to screw it up, I think maybe hoping it would go away, because it was clear they didn't have the wherewithal to market it. So we did wind up suing them, and that—we didn't have otherwise very many suits, and they really weren't over patents, other than the IL-2 dispute, and then—which was resolved essentially in our favor. Cetus lost that deal.

And then the—that one issue you brought up. But I don't—you know, I couldn't even tell you who the individuals were that were suing us.

JONES: Well, I think Alex Rich was the big guy at MIT, and—but I haven't talked to them yet. I'm going to Boston—

DUZAN: Well, you should. I don't remember the details. Obviously, there were disagreements all over the place in that business at that time.

JONES: Sure.

DUZAN: That was a—that was the wild west. It was. You know, industries at their birth are full of that kind of stuff.

JONES: Yeah. So right place, right time, do you feel like for yourself?

DUZAN: Yes. I've always thought that I was very fortunate to have simply stumbled into the biotech business in the way that I did. And I was—I've been very pleased that I was able to respond in a way that we were one of the success stories that came out of it. And our shareholders, all except those that had no faith, all made a lot of money. You bought Immunex at the offering in 1983, your return was enormous. And our employees did extremely well. The earliest employees of that company all became well to do people.

JONES: Yeah.

DUZAN: We educated gobs of kids whose parents worked at Immunex.

JONES: Yeah. That has to make you feel very good, right?

DUZAN: Yeah. Yeah.

JONES: Seattle hasn't quite taken off the way other places have. I mean, there's stuff going on there, but—

DUZAN: Yeah. No, I agree with that. And I truly believe it's the remoteness of it, compared to where the centers are elsewhere. I think that Seattle is—has the critical mass to be the equal of

Silicon Valley in the electronics, software field. But it doesn't have the critical mass to be the equal of the bay area or Boston in biotech.

JONES: Yeah.

DUZAN: Unfortunately. There's a tremendous amount of great university research being done here, but it has not led to entrepreneurship.

JONES: Well, listen, after going through this again, anybody else come to mind as somebody I should contact and talk to? I've got the names you mentioned earlier.

DUZAN: Yeah. Well, let me give it another quick thought. Tom Cable was a good one. <**T: 95 min**>

JONES: [Yes]. Good. Thanks.

DUZAN: Yeah. And Dick Kramlich could be a good one to talk to.

JONES: Yeah. Yeah.

DUZAN: You probably have talked to Dick, or you're going to.

JONES: I haven't talked to Dick. I talked to Chuck Newhall and Jim Barrett at NEA. But yeah, I should—

DUZAN: They got into NEA I think after NEA got into Immunex. And Kramlich was our guy. And then Frank—Basel? Frank—

JONES: Bonsal?

DUZAN: Bonsal. That's it. Thank you. Frank back east was also involved with us. And we were involved with Rothschild's in London and in New York.

JONES: Oh, was Jim Blair in—

DUZAN: Jim Blair was involved in getting the London fund to invest in Immunex.

JONES: David Leathers was—

DUZAN: David Leathers was the guy at the time. And then he gave way to Jeremy Cook, who came in and ran that fund. They later created a second one, and I was on the board of that for a number of years. I was by that time out of Immunex. And I was on the board of the second biotech fund that they created over there, along with Jim Grant, who ran the—what was the name of his company? Never did very well. And he was a former deputy US public health director. Surgeon general. Deputy surgeon general. And a couple other investment guys in the US. Jim Blair was always very involved in those funds.

JONES: I'm trying to get a hold of people in ZymoGenetics very early. I know the two scientists, but do you happen to recall who are the businesspeople that sort of helped them put that together? Because I'm pretty sure it wasn't these two scientists.

DUZAN: No, but, you know, they didn't really have very good—

JONES: Yeah. Okay.

DUZAN: I mean, it really wasn't much of a company for a long time. And then Bruce—

JONES: Bruce Carter.

DUZAN: —Carter came in, and that's kind of when it went from being not much to being something. And weren't they by that time held to some considerable extent by another company?

JONES: Oh, right. Novo, right?

DUZAN: Right. Novo. That was it.

JONES: Yeah.

DUZAN: And I—didn't he come out of Novo, maybe, or—

JONES: I—maybe. Yeah. Again, I don't remember, but—

DUZAN: Yeah. They had put that deal together to do research or transfer technology or something, and I think somehow that's how he emerged there. But that took forever to get going. Zymo was a very late bloomer, although born at precisely the same time as Immunex. It didn't do any of those other things for a long time.

JONES: And did you know the Genetic Systems guy? I understand Nowinski—I haven't met him, but I understand that the Blechs and Nowinski and [inaudible].

DUZAN: Yeah. Well, it was just exactly what you'd expect out of the Blechs and Nowinski. I don't know Nowinski very well. I met him a half a dozen times. I never thought of them as a serious company. I thought of them as a serious promotion, and as it turned out, they weren't a serious company. They sold out for a farthing compared to what their market cap had gotten to be. Everybody assumed Immunex was the number two company in Seattle for the first two and a half or three years, because they were just going gangbusters, if you believed all the stuff coming out of there.

But Henney and Gillis were absolutely convinced that monoclonal antibodies were not going to be <T: 100 min> the basis of a business at that point.

JONES: They weren't for a while.

DUZAN: Yeah.

JONES: It took a long time. Yeah.

DUZAN: And that was the basis of their business. And they could take a contract to sell somebody a monoclonal antibody for diagnostic purposes, which you knew was not worth a hoop in hell, and make it sound like they'd just cloned people. It was unbelievable. But the

Blechs I thought—you know, too bad that an industry has to have the Blechs. But every industry I think gets some people like that.

JONES: Yes. Actually, I think the biotech business has done pretty well in terms of being—not having all of these—

DUZAN: Not having very many of that—

JONES: [Inaudible]—

DUZAN: Yeah. No, I agree. I completely agree.

JONES: Pretty good record.

DUZAN: We had the deal in New York with Martha Stewart.

JONES: Right. But see, but that's, you know, you have to reach pretty far before you get to those, right?

DUZAN: No, you do. And a lot of very, very strong, good companies with good people emerged out of all of that, and some that, they're—the other thing that people could never get away from is that there is a huge amount of luck involved in the ones that won and the ones that lost. We were lucky. Some other very good companies weren't lucky.

JONES: Yeah.

DUZAN: I think Chiron comes to mind first of all as—in that way. They didn't quite have the same amount of luck in terms of having things that just fit together right, so they could just keep steadily going ahead. And what is it? They were—Hybritech, wasn't that that big monoclonal company that—

JONES: San Diego. Right.

DUZAN: Same—I think they had quality stuff. They just—you know, they—it took them forever to get to a product, and because the science wasn't there yet.

JONES: Right. Yeah. They had to humanize the antibodies before they could make their [inaudible]—

DUZAN: Part of ZymoGenetics—was it Zymo? I think so. Was a couple of Scandinavian people. They were from Sweden or—man and wife, and they were doing monoclonal antibodies. And somehow I think they wound up in Zymo, and it was—Henney and Gillis used to call it Scantibodies. [Laughter] There was a lot of gallows humor.

JONES: Yes. Yeah.

DUZAN: I think throughout the industry, though. I mean, I'd go to those—Bob Swanson and I, and Roger, and two or three others, used to occasionally have meetings that didn't involve anybody else. And we'd talk about dealing with the big companies and trying to make IBA work. And this was before I became the chairman by a number of years. And there was—we were all kind of the same sort of people. I mean, we were—you know, you're hanging out, as far as we were hanging out, in some ways, there's plenty of rooms for gallows humor in that kind of a setting.

JONES: [Yes]. Yeah. So Bob Swanson was—I never had an opportunity to meet him, so I don't—

DUZAN: Well, I thought Bob Swanson was a great guy. He was a guy who I think better than any other people recognized what he did well and what he didn't do well. And he set Genentech up so that it could maximize—get maximum benefit from him. But he didn't let his ego get terribly involved in how that worked out. And I admire him a lot. I thought it was a great loss when he went. And I always thought it was too bad that—I didn't think they necessarily always had the best CEO and—for the situation that they had. And had he been able to be more involved for a longer period of time, I think it would have been [inaudible]. I liked him. I liked George Rathmann. George was not a guy you got to know and pal around with. George—there is not a whole lot of fun in George. He was a very serious guy. And I don't mean by that that he was grouchy or—

JONES: Yeah.

DUZAN: He was not a—he was older, first of all, than the rest of us. I was forty. Swanson was slightly younger than me, I think. And Roger and I are the same age. There were a lot of guys about that age. But George was almost a generation older than me.

JONES: [Yes]. Roger was a—he had fun doing what—

DUZAN: Roger Salquist would find fun at Auschwitz. I mean, he is just that kind of guy. He is up a lot. I don't know how he does it some days. Things cannot—can be not so sunny, and he's just—he has a great time. He has a great wife. Nice guy. For everything except golf. Not a great golfer.

JONES: He's not a great golfer? Are you a great golfer? Good?

DUZAN: I'm a—I can play.

JONES: And that's—this—

DUZAN: I've devoted a lot of my time since I retired to trying to <T: 105 min> see how good I can play. I'm a fairly low single digit handicap.

JONES: Yeah? Okay. Good. And so that's the big draw to Arizona, is the—

DUZAN: Well, yes, but my wife likes the—this is a place to work on her sculptures. She thinks that she does better work when it's not cloudy, when the sun's out.

JONES: Yeah?

DUZAN: And that her creative juices run better in a sunny climate. Plus that she is a—her hobby is to ride dressage—

JONES: Is this—

DUZAN: —and that's the—here or Southern California are two great places to do that. So she does it here, and I would—I told her there was only one place we couldn't live, and that was in California.

JONES: Not California?

DUZAN: Not California. I could kind of see some of the financial issues coming—

JONES: Oh, okay. Yeah.

DUZAN: —quite a long time ago. And I just didn't want to be—

JONES: Right.

DUZAN: —a resident of California. We decided we were going to be residents of Arizona or wherever, Hawaii, wherever we went for the sunshine, because we'd be here eight months of the year. And we were going to live in the great northwest four months. And that's what we've done. We go up there, and—

JONES: But that's a nice—it's a very—it's a real change of pace, and—

DUZAN: Yeah. Everything about it is different. But I like it here. And I've enjoyed the things that you can get involved with in the community here. This is a community growing up, much younger than Seattle. And I like that, because we—I've helped to create two or three entities, get them set up. I don't—

JONES: Yeah.

DUZAN: I mean, I'm not doing anything to run them. But they fill nice niches here, important niches. And for the most part in North Scottsdale, that area up there, nothing—none of that existed.

JONES: Well, Steve, is there anything else we should know, or anything else you'd like to say—

DUZAN: No, I—that's—

JONES: —on the record? [Laughter]

DUZAN: That's funny. I was amazed when I went back to—just in the drive coming down here today, I was thinking about things that maybe ought to be brought up, and I was amazed that at this distance of time, how details have slipped. I mean, I can—the big flow of events is still very clear to me, but the details, the little things that happened. And like that IL-1 thing, I hadn't thought of that for fifteen years. But—

JONES: Yeah, that's our problem, because—the historian's problem, because we don't know—I just happened—the guy happened to call me and tell me about IL-1, and otherwise, I wouldn't know, and I'm sure there are a thousand things like that. That would be good to know, that we just don't know about, so—

DUZAN: To a very real extent, that never turned into anything, because IL-1 didn't turn into anything.

JONES: Right. Yeah.

DUZAN: You know, you can have a big fight, but have a big fight over something that has no value or no—

JONES: Right.

DUZAN: —appreciable value is—only academic people can do that.

JONES: Right. [Laughter] But just the fact that there are details that you want to—you know, how many stories that [inaudible] in the history of biotech that were—

DUZAN: Right. Will this be a big book?

JONES: I think it's going to be—yeah, it's going to—it needs to be big—

DUZAN: A real tome?

JONES: —because you've got a lot of great stories.

DUZAN: A lot of [inaudible]. [Yes].

JONES: And the way we're organizing the book is we're going to follow—this will be volume one, by the way, but we're going to—the fifteen or twenty major companies between—you know, starting from Cetus, Genentech, through, I don't know, Genzyme, '83, '84, '85, something like that. Follow them through—I'm not sure exactly where we'll stop this, at some turning point. Maybe it's when Amgen gets their blockbuster drugs, and that changes the industry. Or maybe it's a little bit later, when—the mid-nineties, I think there were a lot of FDA approvals were going on just at the time when financing was getting difficult. But in any case, we're going to tell the story of these companies. There's a lot there.

DUZAN: Oh, yeah. Another guy that was involved, I should—it just made me think of him as you were talking there. David Hale was another guy who was—

JONES: Yeah, I've—we talked to David. Yeah.

DUZAN: David was a very valuable guy to the industry. I appreciated him a good deal.

JONES: And he was involved with the IBA?

DUZAN: Yeah. And he used to get involved at Laguna Miguel. And he—more than once, when Swanson and I and these other guys would get together, he would be along with us.

JONES: When <T: 110 min> he was at Gensia or Hybritech, Gensia, or—

DUZAN: Well, I don't remember him from Hybritech, so it must have been Gensia.

JONES: [Yes]. Yeah. He was at Hybritech.

DUZAN: Yeah. I know now that you said that that he was, but I don't remember him being out in the public side of what we all did.

JONES: Well, I think Ted Greene was the CEO down there.

DUZAN: Yeah. He was.

JONES: And David was the president for a long time, and—

DUZAN: Okay. That could have been it.

JONES: And then when to Gensia and became CEO.

DUZAN: [Yes]. Yeah. That's what I remember him most from, is then.

JONES: Yeah. Yeah, I think he was very active in San Diego, too.

DUZAN: He was. He was.

JONES: [Inaudible].

DUZAN: One time we had our meeting there next door to Torrey Pines at Laguna, and I remember him specifically from that meeting. But we used to just fly in and sit around a hotel room for a day, and then we'd fly back out. But it was always worthwhile, because we—and the guy who was really the impetus for getting it going was Swanson.

JONES: Yeah? [Yes].

DUZAN: All right.

JONES: Thank you, Steve. It was great.

DUZAN: Thank you very much. Ooh, I'm right on time.

JONES: Good. Good.

DUZAN: I've got—I'm almost—

[END OF AUDIO, FILE 1.1]

[END OF INTERVIEW]