CHEMICAL HERITAGE FOUNDATION

DENNIS FENTON

Life Sciences Foundation

Transcript of a Research Interview
Conducted by

Mark Jones

Malibu, California

on

5 August 2013

(With Subsequent Corrections and Additions)

CHEMICAL HERITAGE FOUNDATION
Center for Oral History
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INTERVIEWEE

Dennis Fenton was born and raised in Mineola on Long Island, New York. He attended Manhattan College in the Bronx and later received his PhD in microbiology from Rutgers University in 1977. Motivated by his father's cancer diagnosis, Fenton was interested in becoming an industrial microbiologist. For his thesis, Fenton purified enzymes for the degradation of a polymer on the fungi cell wall, which had applications during the Vietnam War to prevent fungal infections in burn wounds. Fenton's graduate advisor, Dr. Dougals Evely, landed him an interview with Pfizer, where Fenton worked for three years. During that time, Fenton became interested in biotechnology while reading about recombinant DNA and Genentech. He began working for Amgen in California; the company was in its early years and Fenton was working on fermentation. While he was working as a laboratory head, Amgen successfully cloned erythropoietin [EPO], which led to the product Epogen. Despite his science background, Fenton was promoted to the Vice President of Sales and Marketing, though he also remained active in process development. In this role, Fenton helped to raised Sales and Marketing from three hundred million to roughly one billion dollars. He also dealt with the ongoing legal battles between Amgen and Genetics Institute and Johnson & Johnson. In 1995, Fenton left Sales and Marketing and took over as head of operations, where he oversaw the creation of manufacturing plants in Puerto Rico and Rhode Island. He lives in California, where he enjoys an active lifestyle and travels with his wife.

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. The Center for Oral History, Science History Institute, is committed both to preserving the recording of each oral history interview in our collection and to enhancing research use of the interviews by preparing carefully edited transcripts of those recordings. The preparation of interview transcripts begins with the creation of a verbatim typescript of the recording and proceeds through review and editing by staff of the Center; interviewees may also review the typescript and can request additions, deletions, or that sections be sealed for specified periods of time. The Center keeps track of all changes that staff, interviewers, and interviewees make to the original

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INTERVIEWEE: **Dennis Fenton**

INTERVIEWER: **Mark Jones**

LOCATION: **Malibu, California**

DATE: **5 August 2013**

JONES: Okay, tell me about yourself. Where do you come from originally?

FENTON: I'm from Long Island in New York.

JONES: What town?

FENTON: Mineola.

JONES: Mineola. Is that North Shore?

FENTON: Ah, middle of it, Nassau County, in the middle.

JONES: [Yes].

FENTON: So right outside, about the tree line, you know. It had a little bit of grass on it.

JONES: Right, yeah.

FENTON: So, grew up there, went to Manhattan College in the Bronx, went down to Rutgers for my PhD in microbiology.

JONES: Yeah, well, tell me a little bit about early schooling. You developed an interest in science somewhere, where did that happen?

FENTON: Yeah, I think that pretty much happened, I think, probably even in grammar school I was interested in being a scientist, you know, one of those kids with a chemistry set always blowing stuff up and mixing things and taking stuff apart. I didn't have the mathematical strength I guess to become an engineer and biology was always my love, so, sort of, just followed my love in biology into microbiology.

JONES: [Yes]. Did you get any encouragement at home? What did your father do?

FENTON: A lot of emphasis at home on education. They weren't a college graduate, my parents weren't, but they were going to make sure we all were, so there was no—a lot of encouragement for that. Sent us to a prep school on Long Island called Chaminade, so we were geared to go to college.

JONES: Good. [. . .]

FENTON: So Chaminade prep school, a lot of encouragement to go to college, pursue a degree. So I had a lot of economic and emotional support growing up for advanced education.

JONES: Did you have an idea going to college that you were going to study microbiology?

FENTON: Yeah, I was interested in biology, and then I met a professor there who was a microbiologist, and he became an early mentor of mine, and I did some independent research with him and sort of became enamored with microbiology.

JONES: What about it was appealing? Did you do any actual work?

FENTON: Yeah, I'll tell you the truth, I didn't like torturing animals. I didn't like playing with mice and rats. I did some of that and it just didn't seem as much fun. At least with microbes you could run experiments and get data, but you didn't have to cut anything up to do it. So that's sort of what I enjoyed about it. It was fun. Then really got into micro for my PhD at Rutgers.

JONES: And going there, did you have a notion that you would pursue this as a career?

FENTON: Yes, I wanted to become an industrial microbiologist. My father had become ill with cancer and I wanted to develop medicines. So it sort of became, I guess, an underlying psychology drive was to work hard and to—

JONES: Develop that and go into the pharmaceutical industry.

FENTON: Pharmaceuticals, yes. So I had no inclination whatsoever to go into academics. I knew I was going to get a PhD and then to go to work in the pharmaceutical business, so I sort of had a clear path of what I wanted to do.

JONES: [Yes].

FENTON: And studied industrial enzymes there. Why didn't I study something more applicable to drug development? Well, you know, I met a guy named Dr. Douglas Evely who was a very personable, persuasive, wonderful human being, a very, very close friend to this day, and decided I'd go work with him, and he was working in industrial enzymes, which, in retrospect, was a wonderful twist of fate. This was before recombinant technology, and when recombinant technology came, the ability to produce proteins out of microorganisms was a skillset that people wanted.

JONES: Right.

FENTON: So that became—I got lucky. You know, you studied something that all of a sudden went from sort of an edgy not so interesting area to sort of the mainstream of what they needed to do to do recombinant technology.

JONES: So your thesis work was working on an enzyme, purifying an enzyme.

FENTON: Yeah, purifying an enzyme from fungi for the degradation of a polymer that's on the cell walls of fungi. So what we were trying to do was use this enzyme as a therapeutic to stop fungi infecting burn wounds. They were getting a lot of burn wounds, this was the Vietnam War, dropping napalm on people, sometimes they drop it on their own people, they drop them on innocent civilians. So burn wound research is being funded by the US Army. So I was funded by the US Army to work on a cell wall degrading enzyme from a fungus.

JONES: And so was Evely at that time?

FENTON: Yeah, he was my advisor and that was his grant. So did that for a couple of years. I was lucky enough **<T: 5 min>** to get out of school very quickly, three-and-a-half years I got my PhD, because the experiments worked.

JONES: And you were serious about this, you were putting in a lot of hours?

FENTON: Yeah, working pretty hard, but I won't pretend it was all slave, graduate study was fun. I look back and say, "Why did I rush through that time so much? That was the best time of my life?" You didn't have any money, but no one else did, and you didn't even notice, right? You just had a lot of friends and a lot of good times. And then he hooked me up with an interview over at Pfizer pharmaceuticals in Groton, Connecticut.

JONES: So he had industry connections—

FENTON: Connections, he did, he did. Most of his graduate students went into industry. So I went up there and—

JONES: Did that have anything to do with your selection of him as a mentor at Rutgers?

FENTON: Well, yeah . . .

JONES: Did you go to Rutgers for him?

FENTON: Yeah, I went to Rutgers for him, but Rutgers was known as an applied microbiology school.

JONES: I see.

FENTON: I had opportunities for other schools like Columbia and schools like that, but they weren't applied micro, and I always, like I said, wanted to go into industry, so I wanted to go to an applied school.

JONES: And you didn't care about academic prestige?

FENTON: [No] , you know, right, exactly, and Rutgers sounded pretty good.

JONES: Rutgers is okay.

FENTON: It's okay, good enough, who needs Columbia, you know? It's not the state university of New Jersey but—and Rutgers has a good name. And it's known for it's microbiology. Selman Waksman discovered and developed streptomycin there, so that was—

JONES: Was he still there at the time? He had like forties or fifties?

FENTON: No, he was gone, but he still had the history of developing drugs out of the school, so that's what connected with me. I was like, oh, antibiotics came out of here. So then I went up to Pfizer, worked there for about three years and recombinant DNA started.

JONES: Okay, what year did you get your PhD?

FENTON: Nineteen-seventy-seven.

JONES: Okay, so this stuff is in the works.

FENTON: It's in the works but not really hitting the fan yet.

JONES: Did you know about Genentech?

FENTON: Yes, you had to be asleep in science not to know about them. I kind of watched them, knew a few people had gotten work there. And Pfizer was just kind of slow on picking it up, so I got a little impatient, being a young impatient young man, and started looking around, and answered an ad in the Chemical Engineering News. You know, the little blurbs that said, "Applied molecular genomic seeks scientists." And in that twentieth anniversary book, I don't know if you got it, I actually kept the ad and I put it in the book.

JONES: Oh yeah. Do you know who placed the ad?

FENTON: Yeah, it was George Rathmann and Susan Hirsch, you know. And then I went on my interview… No, he called me up and said, "Come on out," and I said, "Sure, California, I'll come out." So got on a plane, flew out here, and I thought I'd get to see a company. Instead I just met a guy, George Rathmann.

JONES: Yeah, where did you meet him at?

FENTON: In Building 1 of Amgen.

JONES: And there were how many buildings at that time?

FENTON: It was one third of one building. We shared it with Continental Singers and a ball bearing company, and it was just this tilt up concrete building in a warehouse, you know, in an industrial park.

JONES: This is about a year after the company was officially founded?

FENTON: Yeah, about a year after. And I knocked on the door, and he answered himself. And I thought there was going to be actual scientists there, and on that day, he had hired a couple of people but no one was there, it was just him.

JONES: [Yes], no lab there?

FENTON: No, nothing. Just offices. They were starting to design the labs. And, you know, I thought I'd be giving a presentation to a bunch of scientists so I brought in my overheads, you remember those things, with, you know, my publications, my patents and all this stuff. Instead I sat down with George and for three hours he convinced me, you know, trying to convince me I should come and join him. So that went—you know, he's a persuasive guy, but. . .

JONES: Was anybody at Pfizer talking about this stuff?

FENTON: There were two or three guys. They had hired two molecular biologists, but they were in this other—they were like in this place you couldn't go to, you know, they were very conservative in their approach. They were just sort of toying in it, and I could see they were never really going to lean into it. And they never did, right? They had to buy Wyatt to get recombinant—

JONES: Yeah, twenty years later.

FENTON: Twenty years later, right? And, you know, I just had arguments with my vice president. He told me, it's a quote I love, he said, "Proteins will never be therapeutics. Your job is to go and help chemists be successful. It's a small molecule company you work for." And I went, but—

JONES: That's a good quote, we can use that one.

FENTON: That's today. [. . .] I was like, all right, that's all right, that's the small molecule company you work for, I'll put my resume out. I'm only twenty-eight years old, I'll go somewhere else.

JONES: Well, it's an interesting time.

FENTON: It was.

JONES: You were convinced that the technology was going to work. I mean, nobody had actually—at this time, maybe they'd cloned insulin.

FENTON: Just cloned insulin, they just cloned it. So was I convinced? No, but I was excited **<T: 10 min>** about the technology, who knew if it was going to work back then, right? It was unproven.

JONES: Well, Pfizer, you got a pretty good job there, right?

FENTON: [Yes]. Some people thought I was nuts leaving a good job to go to work for a crazy company.

JONES: Who were the people who told you, you were nuts?

FENTON: Everybody who worked at Pfizer with me. I made sure I didn't burn any bridges and was respectful on the way out. Another quote from the same individual, I was like Icarus, and I was going to get too close to the sun and my wings would melt and I'd come trolling back for my job. I said, well, maybe, I hope not, you know. Luckily that didn't happen.

JONES: What did George Rathmann say to you in your meeting?

FENTON: He was quite a—I don't know if you ever met George but I'm sure his reputation is there.

JONES: I did.

FENTON: He was an incredibly charismatic, very, very loquacious, very well-spoken guy, and literally it was a two-hour monologue. I sat there just nodding my head. You know, he asked me a few questions like why do I want to leave Pfizer, but mainly he was just telling me he was going to build the biggest, fully integrated pharmaceutical company that was going to be bigger and better than Pfizer, he said that. And I looked out the window and there was a bunch of dirt. And I thought this guy was nuts! So I went home and my wife said, "How was it?" I said, "Ah, it's just—the guy's nuts, he thinks he's going to build a big company, he's got nothing but—he's got eighteen million dollars"—I think that was the amount.

JONES: Did you know about his background?

FENTON: Yeah, he told me about that, but, you know, this was before the internet so you kind of didn't know much about him. I knew he was a vice president at Abbott and I knew he was a scientist by training, but that was about it. And when I met him, he was very, you know, he was somewhere, you know, when you think back, when you try to put your mind back to where it was, he was either crazy or he was brilliant, one or the other, and you didn't know, right?

JONES: Yeah.

FENTON: It was just like, well. . .

JONES: He was a chemist, right?

FENTON: Yes, from Princeton. I think a physical chemist from Princeton, then he went to 3M and spent most of his career at 3M, Head of Research there, and then on to Abbott. Then on to Litton, I think, for a little while, and then to Amgen.

JONES: Did you have to convince your wife about what to do?

FENTON: Well that's where we're going. So a couple of weeks later I figured that's the end of it. He calls me up and he says, "What do you think?" I said, "Well, George, I've got a job. This is pretty risky where you're asking me to go." I went to another company for an interview, Genex, they have like real labs and four hundred and fifty people. The company went out of business.

JONES: Oh, you did go.

FENTON: To Genex.

JONES: Well, tell me about that too.

FENTON: I just went to an interview there because they were doing a lot of similar work to what I was, industrial enzymes, applied microbiology, transformations, more of the chemical side of things. And it was a guy I know who was working there.

JONES: Who was that?

FENTON: Stein? Steinberg or something like that. He was just a scientist, I can't remember, you know.

JONES: So you met Les Glick.

FENTON: I did, for like thirty-five seconds on my interview, you know, the quick walk by and shake hands, "Come join us."

JONES: Who else did you talk to there?

FENTON: That guy who's in charge of the industrial enzymes. There were a bunch of scientists and the names are all gone, I'm sorry, I can't remember. So that was an offer I had.

JONES: That one didn't appeal?

FENTON: It was all right, I was thinking about it. Then George came, and then he calls me back and he says, "Why don't you come back, and this time bring your wife?" And I'm frigging, "Great, a vacation in California!" So we leave Hartford, Connecticut and it's, you know—

JONES: Had you been out here before to California?

FENTON: Yes, and I'll give you that story. When I saw the ad, it said, Newbury Park, California, was where it said, and I remember, because I had stopped for lunch in Newbury Park, California, taking a trip. So California had a major attraction for me. The beach, the sand, Zuma Beach up the road apiece. After my interview I went and looked at that and said, "This is a beautiful place, if it works." So we got off the plane here—we left there, it was like thirty degrees, sleeting—got off the plane and it was eighty degrees here and beautiful, and my wife said, "So what about this job you don't like?" So she was encouraging me to take it as well.

JONES: How old were you at this time?

FENTON: I was twenty-nine, almost thirty.

JONES: You've got to start getting serious, but you still have time.

FENTON: Yeah, I've got time, no kids, and the department I was working at at Pfizer had a lot of old guys talking about how many years they had to retire, everybody was, sort of—it wasn't exciting enough for me.

JONES: Working for the government.

FENTON: And when I came back the second time for George, with George [inaudible] but, like, with Genex rather, there were a couple of scientists there. **<T: 15 min>** He had hired a few more people, this was maybe another month or two later, and people were there. And I did interview, really interview people. It was like a mutual interview, I'm interviewing them, "Do I trust these guys? They look smart." And they were smart.

JONES: Do you remember who it was?

FENTON: Larry Souza, Bruce Wallis. Amgen's first employee was Bruce Wallis. I interviewed with him, and George, and I think that's it. Oh, an RA researcher named Henry Shea. He left Amgen a number of years ago. But I mean, there were people and there was a lab and there was stuff, there was an autoclave, things happening.

JONES: Did they tell you what they were doing?

FENTON: Okay, they were doing everything. I mean, he was going to apply this technology broadly everywhere. We're going to do transformation of chemicals into high value chemicals. We're going to do diagnostics. We're going to do therapeutics. You know, it was a technology looking for an application, basically, when you think about it. We're just going to try everything. So I took the job.

JONES: Did you think about any of those applications and think, well, maybe this is a good idea and this will work?

FENTON: Yeah, I mean, again, I wasn't certain. It was a lot of risk. No one knew for sure whether or not the thing would work, and would the FDA approve a drug from a recombinant organism, that was in the air. Could you grow recombinant organisms on a large scale or would they prevent you, remember the ten liter rules back then, you only could grow it into ten liters. But I took the chance.

I can't say I was certain, but, you know, then I hung out, and it was a day like today after the interview and I said what's the worst that can happen? I go back to New Jersey and I beg for a job at Roche or Pfizer back there, or go to work for some other pharma company and maybe I know something about recombinant technology and maybe they'll be interested by that point. So I figured maybe it'll go five years and I'll be back east, which is probably what my relatives and my mother and everybody else wanted was for you to come back.

JONES: Yeah, it's a long way.

FENTON: It is.

JONES: Longer then than it is now.

FENTON: Oh yeah, it seemed like the other end of the world back then.

JONES: Well, they brought you out here to make stuff, but they didn't have anything to make at that time.

FENTON: Yeah, exactly. So I showed up and I said, "George, what's my job?" This is another quote I'll never forget. "I don't know, Dennis, but you're going to have to figure it out." And I was like, okay. So no one had cloned anything yet, and I was just running around seeing what I could do to help people. And it wasn't very long, it was a period of maybe a month or so before they started having their first clones. It took me six months to get some fermenters in. I had to buy ten-liter fermenters and get those and put them in.

JONES: Were you at Pfizer long enough to sort of know your way around the whole business?

FENTON: No, not at all. I had very narrow lab experience of scaling up things at Pfizer, so I was learning as I was going. I'd never bought a fermenter before. Pfizer just had big stainless steel stuff that we used. And they weren't from New Brunswick, it was stuff they had made back in the fifties and sixties and before I got there.

JONES: So George Rathmann must have known that you didn't have an enormous amount of experience—

FENTON: But I had a lot of confidence, I'll put it that way. [Inaudible] I go through it. I think George hired a lot of young men who were very eager, confident and brash, annoying brash, but we just went and did it. If we knew how hard it was going to be we never would have tried, but we just did it. That was great fun. So bought some fermenters, set them up. The first fermentation. My first lab was a closet, because they hadn't designed anything into the buildings that were built, but there was a closet, about six by six [feet], I slammed some fermenters in there and attached them to the steam generator that ran the autoclave. And when they weren't running the autoclave I could sterilize my fermenters and started growing *E. coli*. The original

E. coli didn't even have an insert in it, it was just growing *E. coli* to figure out how to grow *E. coli*. No one was growing *E. coli* back then.

JONES: So how did that go?

FENTON: It was new, it was different, it was the different organisms, they're rapidly growing. In the traditional world of Big Pharma we were very slow growing stuff, Streptomyces and penicillin for antibiotics. I remember they inoculated and you were done in eight hours. It used to take five days for a fermentation back at Pfizer. You could go home and go to bed and come back and take a sample. This was a lot faster. It went well. So we had a lot of good times in the early days. Kirby Alton was hired, started a few weeks before me, and Larry Souza was earlier than him. **<T: 20 min>** Then Kirby and Dan Rathman came together, because Kirby had worked with Dan in Georgia, so they showed up, and it was an impressive group of young people and we were taking a shot.

JONES: So when you first put a gene in *E. coli*, what was it? What was the first one?

FENTON: You know, that's going to be a good question, and Kirby might remember better than me. We were working on things like beta endorphin, we were working on calcitonin, we were working on, of course, gamma interferon. They developed a consensus alpha interferon, that was early, but the first ones I'm pretty sure were like beta endorphin or calcitonin, some weird things like that that never were products.

JONES: That's interesting. So there were research meetings? How big was the company?

FENTON: Yeah. There were twenty of us. So the research meeting we were all in one big office. So research meetings were continual. And all staff meetings were every day. And George was there every day in those days most of the time, he was very, very active.

JONES: So he knew everything that everybody was doing.

FENTON: He used to come around the labs and he'd ask you, “What are you doing?” And, you know, it was okay. I left Pfizer where I did a monthly, a quarterly, a six-weekly report. All I did was remain in my office writing reports it seemed, and here there was no written reports at all, but George went around. I remember one time I told him what I was doing, and he looked at me, he said, “You told me that last week, you'd better have something new when I come next week.” And I was like, oh, he actually remembers what I told him.

JONES: And who was influential in terms of when you had meetings and you're discussing, okay, is this scientifically possible?

FENTON: We had a Scientific Advisory Board that was very influential. So those—

JONES: How often did they come in?

FENTON: They came in about once a quarter, and those people in the early days were very, very helpful in target selection, solving real problems people were having, more on the molecular biology side. When I gave my presentations to the SAB they were kind of, you know, who wants to hear about fermentation and recovery of these organisms, these products, they're not so interested in all that.

JONES: There was nobody on the Scientific Advisory Board interested?

FENTON: There was no Charlie Clooney who was an advisor to Genentech. We didn't have one of those.

JONES: Was he Genzyme, was he doing Genentech too?

FENTON: He was Genentech in the beginning, before Genzyme.

JONES: Really? I didn't know that. Okay.

FENTON: He was also an advisor I had at Pfizer. He was making the rounds at all of them, yeah.

JONES: And he was at MIT at that time?

FENTON: Yes he was, a young professor at that point. There weren't really a lot of chemical engineers then, they were just starting to train those folks, there was no biochemical engineering. And MIT was one of the first places to do it.

JONES: So did you run into problems with the bugs and—

FENTON: Oh yeah, you know that phaging, they're phage sensitive, which is this virus, so, you know, you get a viral infection and your cell density would go to zero, would go like that and down, and it would foam out and the menta would explode, there was all kinds of fun times.

JONES: And then, I mean, if you got a virus, then you've got to tear everything apart.

FENTON: Apart, and clean it, exactly. And we used to do this terrible treatment with formaldehyde; we'd steam it into the room. But then, you know, working with the molecular biologists, God bless them, I told them that this isn't going to scale, and they went away and found a phage resistant one. They kept screening against phages until they found one that wasn't very susceptible to any of the phages, and so we got rid of that problem. That was very helpful.

JONES: So did you ever grow products in *E. coli*?

FENTON: Sure, Amgen's Neupogen product is an *E. coli*-based product, yeah, so yes. We had a couple of them, Interferon, we put a lot of products into clinical trials of *E. coli*, and the one that came out first was Neupogen. Neupogen is *E. coli*-based. As you know, EPO is my mammalian cell product. So it was lots of fun. Thinking back on those days is crazy—crazy long hours, a lot of hard work, but a lot of—it didn't feel like work. It felt like you were doing something important and you didn't notice that you were working twelve hours a day, every day.

JONES: Were you at the same place where the campus is now?

FENTON: [Yes, yes] that's where we got lucky. We occupied four buildings for quite awhile which were right across the street from each other. Then we put our Epogen plant down the block. Again, we were just in an industrial park so people would pretty easily move out. There was a Rolls Royce dealership. They stored their cars. So we took that building over. They just put the cars in another building **<T: 25 min>** somewhere else, and we were able to grow into that. And I think it was Northrop, no, Raytheon had a large complex right there. And of course defense went in the toilet just as Amgen was growing in the mid to late eighties and we were able just to expand into their buildings. As they pulled out, we moved into them. So we were lucky to be able to stay there and develop that campus.

JONES: You joined in ’81?

FENTON: Yes.

JONES: I was looking at the red herring for the IPO and there's a plan in there, this is early ’83, right?

FENTON: Right.

JONES: There's a plan for a forty-thousand-foot production facility.

FENTON: [Yes], in Chicago.

JONES: Was it in Chicago, did that come about?

FENTON: No, it didn’t. It was an interesting thing. George calls me into his office and he says, “Hey, Dennis, we're going to build a plant in Chicago.” And I look at him and I'm like, you know, the company is, like, fifty people at the time, and I'm like, “Chicago, George, are you nuts?” He goes, “You go where the money is.” So the mayor of Chicago was going to guarantee some loans to Amgen.

JONES: Were you afraid he was going to send you back to ice and snow?

FENTON: Yeah, I didn't want to go to Chicago, that was clear. So my first job was to hire some people who wanted to go to Chicago, and I did. And that's Bob Andrew, and if you ever get a chance to talk to him—

JONES: I talked to him on the phone just briefly. He said something about that.

FENTON: I hired him and he was going to go off and build the Chicago facility. And it was funny, because we didn't have anything to make, so how do you design a plant when you don't have any products? It was quite challenging. So we ended up designing a—

JONES: Did it make sense to you?

FENTON: Well, I think it was, to be diplomatic, since the tape is running, I think it was very beneficial for the IPO to be able to say you were put a manufacturing plant together.

JONES: You think George had that in mind?

FENTON: Yeah. Because as soon as the IPO was completed, let's just say his focus on the manufacturing plant sort of decreased. And then in the time when we actually did clone EPO, we weren't going to Chicago to put it up, we were building it a hundred feet down the road in Building 6. So I don't know how much is George using this as a lever for the IPO or not, or whether or not events just overtook us. In retrospect it looked perfectly clear we were never going to build a plant in Chicago, but I don't know that. I don't know what everybody's intent was at the time.

JONES: That's interesting. Was EPO a big focus in the company?

FENTON: In the early days, not so much. It became clear that it was an opportunity for us, and Fu-Kuen Lin, have you connected with him, I hope, he'll give you the whole story. He was the first team leader on that project and the gentleman who did clone EPO. So I'd say we were doing a whole lot of other things, gamma interferon, consensus interferon, porcelain chloroform, all kinds of things, but there was obviously a lot of a constrained point of micro manners in the production of stuff, and he always told me EPO was number one, and everybody else is equal to number two. So he always knew that EPO could be the thing we built the company on. And as you know, it was a very competitive race with GI, and we ended up beating them by a couple of weeks.

JONES: Was there a sense of that competition?

FENTON: Yes, very much so. There was a tremendous sense that we'd better get going, and Fu-Kuen wasn't having much success in the lab. And he can tell you, but it was a brute force effort. That gentleman worked twenty-four hours a day for months. I mean, the urban myth is that he slept in the lab. Though I don't think it's true because I never saw him sleep, I just saw him be there all the time. And he put a tremendous effort, him and his technician, and they used probes, and they finally picked it out and got it.

JONES: Yeah. While this was going on, when did they know that, oh, we're going to have to express this in mammalian cells?

FENTON: I think if I recall correctly, we put it both in the *E. coli* and mammalian cells.

JONES: To find out.

FENTON: We put the insert into both. And then we found out it had to be glycosylated to be active, so then it was a clear decision.

JONES: Was that interesting to you? Had you worked with mammalian cells?

FENTON: No, I had not. At that point in Amgen's history I wasn't responsible for that piece of production. I was on the microbial yeast, bacillus, **<T: 30 min>** *E. coli* side, it was another group.

JONES: There was one yeast guy on the Scientific Advisory Board.

FENTON: There was, John Carven.

JONES: Was he involved in it all?

FENTON: Yeah, he was, and he had one of his students, a guy named Grant Bitter, and another guy named Ray Kosky. So there were two yeast geneticists there. Because no one knew which system was going to work, right? There was even a bacillus guy, a Mark Sukowski. So there were a couple of *E. coli* guys, a couple of yeast guys, a couple of bacillus guys, and mammalian cell microbiologists as well.

JONES: So you're head of the department now?

FENTON: Yeah, I'm a lab head with some title like that back when EPO was cloned and expressed.

JONES: And so you're building a team?

FENTON: Yeah.

JONES: You liked doing that, that was appealing to you?

FENTON: Yeah, that was fun, it was about that time Amgen was growing quickly after EPO improved. You kind of have to make your mind up whether or not you wanted to stay—

JONES: After it was approved, this was several years later.

FENTON: Okay, so you're still in that point. You asked me, yeah, I'm building a small team, but let's just say I'm still in the lab. I have four PhDs but I've got a lab bench and a technician myself.

JONES: So you're just thinking about how to scale this up.

FENTON: Right, right.

JONES: And in fact, you don't need to scale it up that much, right?

FENTON: Luckily for us, the dose of EPO turned out to be micrograms, not milligrams, so we were able to use the lab process, roller bottle process, to scale it, and we just multiplied the number of roller bottles. We didn't take the time—and this was a big point of debate with George—to take it into suspension culture. You know, people wanted to do that work, it was sort of cutting-edge technology, and George said, nope, we're going to scale it with just the number of roller bottles, because we don't have time, we were in a rush.

JONES: Was it time or money?

FENTON: It was both, but his point was, look, we don't know how this patent thing is going to—the patent is unclear still—and he says the first guy to get it to the market is going to have an advantage. It's unlikely they'll take a product off the market that's approved. So his thought was, we've got to beat them. Hopefully we'll beat them on the patent, but that's unclear, but get

to the market first. So he didn't want to give any of us three months or anything to delay process development, it was just take that process you've got in the roller bottle, scale it up, multiply it by a thousand roller bottles and build a building down the block that just handles a lot of roller bottles.

JONES: Did you have any worries that you could actually get this to work?

FENTON: Oh yeah, yeah. There was technology out—people handling roller bottles for vaccine manufacturing—so it wasn't totally unprecedented, but this was a therapeutic protein, we had to work with the FDA, they were obviously concerned about aseptic handling, because you've got to unscrew the cap and all that. So we developed automated machines that did it, so it wasn't people, it was all automated. Which was a great decision, and the technology worked. In fact, when we had to build our next plant for EPO we didn't want to change the process. We built another one in Colorado which was really huge that used roller bottle technology. So EPO still made roller bottles.

JONES: Is that right?

FENTON: Yeah, it never got changed.

JONES: Would it make sense to do it maybe?

FENTON: It could. I mean, we tried, actually, to put it suspension culture and we ended up making a slightly different product. So this was to the bio-similar issue. Even the experts, we didn't get the exact same product when we made it that way, it was just slightly different. Different enough we couldn't call it EPO. So we actually just canned it after investing a lot of money.

JONES: Because you'd have to go through the whole approval.

FENTON: We did, well, yeah, it would be a new product. It wouldn't be Epogen; it would be something else, because it was more active.

JONES: Yeah. What else was going on and what other products were you looking at, working with?

FENTON: Oh, we were working with porcine growth hormone, bovine growth hormone. We were working with of all the strangest things, the first thing Amgen got famous for was on the cover of *Science*, was indigo dye. That and some scientists who tried to clone naphthalene dioxihydrogenase, and they cloned that into *E. coli* and they mixed the genes up and out came the other end was indigo, just by total accent. And it was bright blue colonies, and when they grew it in a flask, it was bright blue. And then they figured out it was indigo. So that was our first noteworthy scientific [inaudible] cover of *Science* was that we made indigo.

JONES: But that never became a product, right? Did you sell it to somebody?

FENTON: No. **<T: 35 min>** We could never compete with the chemical synthesis, it was just too expensive. But it was funny that that was something—we spent a fair amount of time turning all my fermenters blue making that. Just a lot of different products through the eighties and early nineties, a lot of wound healing agents. So microbiology, we could clone a lot of stuff by then. That was easy to do. Now finding the right products, the right genes that would turn into products, was another issue.

JONES: And at some point it becomes clear that everything is riding on EPO?

FENTON: Yes, we knew that EPO was going to be, if not everything, pretty much close to everything. Could we have survived if EPO didn't make it? Well, we had Neupogen coming pretty close behind it, like two years behind. So we were lucky we hit two-gram-slams in a row, and that built the company. So could one of them have stumbled? Yeah, maybe. But it was pretty much clear that it was either the Neupogen and/or Epogen.

JONES: So how did the company change, you're growing this whole time?

FENTON: It was very different. The company kept growing, doubling in size every year or two, you know, just tremendous growth. And, you know, the company changed. But we tried to keep what was important about the company the same, which was work hard, play hard, try to keep the values that George instilled, because he left before Epogen was approved. He went off and did his Icos thing, which was quite a big change in the company when he left.

JONES: At some point, he's not walking around the labs anymore.

FENTON: Correct, correct. In fact, he sort of disappeared doing that because he was out raising money a lot, trying to do corporate deals. So that only lasted, say, ’81 to ’82 or 3. Once it went public, he was more of a typical CEO sort of. You know, he'd come in and we'd do those research reviews and he'd be there and active, but he wouldn't be day-to-day wandering around bugging you about what you were doing like the fun early days.

JONES: And you're trying to improve the process with EPO and other products?

FENTON: Yeah, most of our process improvements were driven not so much by cost of goods but because we dramatically underestimated market size. So we built a plant that's supposed to make fifty grams, and that's the world supply for two years. And it turns out that there's supply for the first year. So you've got to figure out how to make a hundred in a plant that you designed for fifty. So we were working very much on getting yields and productivity up. So most of the early days we were doing—COGS was not an important part back there, it was a pretty small part of it. They were very profitable drugs but it was just making enough. And so you'd better figure out how to get those cells more productive, because you've only got a stainless steel reactor that's that big, right? So you'd better get it more productive.

JONES: And what did you have to do? Do you recall the props that you had or the names that you tried?

FENTON: The molecular biologists were excellent at getting super promoters, higher expression level per gram. I hired some chemical engineers that were tremendously successful to get the number of cells up so you'd only get more per cell, then you get more cells per liter, so just more out of every reactor, and we scaled up the recovery techniques appropriately. You know, we were pretty good. But then again, in retrospect, Amgen was lucky again. We were lucky a lot. And that Epogen and Neupogen weren't Enbrel, we had to make tons of products. That's what Immunex ran into, or even TPA, Genentech had to build some really big plants to make TPA. Our plants were very modest investments because the dose was low.

JONES: And were you aware of—GI was your big competition?

FENTON: [Yes].

JONES: So are you wondering how they're making it? What are they doing? Did you have any idea?

FENTON: Yeah, there was—

JONES: Did you talk with them?

FENTON: Yeah, we'd go to meetings and we'd, you know, we were careful about what we said. I knew Mickey Koplove and some other guys who worked there. No, we weren't telling each other, but I knew they were making it in suspension culture, not roller bottles. They'd make fun of me for roller bottles. I could make fun of them now, we won the patent. But yeah, I wasn't really that aware. I mean, the patent issue was the key issue and we knew that was working its way through the courts. And I think it went all the way to the Supreme Court before it was resolved.

JONES: Was that a cause for a big celebration?

FENTON: **<T: 40 min>** We had a lot of celebrations at Amgen, and that was a big one when we won that. A lot of champagne was uncorked that day, early in the day. That one and a lot of our arbitration victories with J&J [Johnson & Johnson].

JONES: That was a little later, right?

FENTON: Yeah, that was in the later—not too much later, a couple years later. Amgen was always good at celebrating. It was a company that really, you played hard, I mean you worked hard and then you played hard, it was a lot of fun.

JONES: George Rathmann left before the approval of the first drug?

FENTON: [Yes].

JONES: What kind of affect did that have? Was that a big event?

FENTON: It was chilling, it was concerning, when George announced he was leaving before EPO was approved. You know, there's a lot of stories about why he left. He wasn't happy with the board and the board wasn't happy with him, believe it or not. That's rumor and not fact.

JONES: Really?

FENTON: George said that he wanted to go off to another challenge, I'm not sure why. He said he didn't want to run a company that was getting as big as Amgen. Okay, fine. And he left it in the hands of Gordon, who was a very, very, very different person than George. In a lot of the external things, he was very quiet. He wasn't as large a personality as George was. But he was a very steady hand on the tiller.

JONES: Would it be fair to describe George Rathmann as kind of the visionary guy, but Gordon Binder's the operational guy?

FENTON: Yeah. I'd say Gordon was very good with the scientists. He didn't pretend he was the head of R&D. He also, I mean, I owe a tremendous amount to Gordon, he took a number of tremendous bets on me. I mean, he put me in charge of sales and marketing, which was perhaps one of the more insane ideas you ever thought about putting a scientist in charge of sales and marketing.

JONES: So we'll talk about that, okay?

FENTON: That was just nuts, yeah. He bet a lot on the people that he had a nose—again, we were all, like I said, aggressive, certain young men who were going to go out and do things, and he would bet on us. If we believed we could do it, he'd give us a try.

JONES: Yeah. So George is gone but you have confidence in Gordon Binder, and everybody does?

FENTON: Well, you know, the company, it was a little bit of a difficult time. Harry Hixson will fill you in a little bit more on it. But even in the twenty-fifth anniversary book we talk a little bit about the conflict between Harry and Gordon.

JONES: Yeah, I came across that. How bad was it?

FENTON: At the time it seemed big, but we were young guys and not used to having any kind of corporate injury. In retrospect, it was relatively minor league.

JONES: And it wasn't real bloody or dirty.

FENTON: It wasn't really bloody. It wasn't like, you know—I've heard stories in Genentech from my friends there—it was nothing like that. People didn't go around getting assassinated all the time because you're on the wrong side in some warfare between the two guys at the top. That didn't happen. It was just uncomfortable. You could tell that they weren't communicating well, we'll put it that way. It was sort of like that.

JONES: But that didn't affect what you were doing?

FENTON: No, I worked for Harry, and Harry was a great boss. He taught me how to manage large numbers of people. He was easy to work for, and I mean that in the best of way. I mean, his expectations were clear and if you delivered, that was fine, he didn't bother you a lot, he left to your job and he trusted you, delegated, taught me how to delegate. He really did teach me how to delegate, because I thought I could do everything myself better than most people could. He helped me to understand that was a non-scalable modem of operation. You've got to hire good people and let them go do their thing.

JONES: So you adapted to that.

FENTON: Yeah, I adapted that to that and worked for Harry for a number of years. And then after Harry left, right about then is when Gordon asked me to go run sales and marketing.

JONES: Okay, let's talk about the sequence here and the time. Your first thing is you put in a pile of plants to [inaudible].

FENTON: Right.

JONES: And then at some point you become a VP. That must have been a big day.

FENTON: It was. It was a big day. I remember Harry, I was under Harry, he called me up and said, “Congratulations, you've been promoted.” I said, “I didn't even ask for it, I don't want it.” Sort of, like, I don't want to be a corporate officer.

JONES: Did you have some notion of what that meant?

FENTON: Kinda, you know? Kind of. But I was like, oh man, I'm really never going to get back to the lab now.

FENTON: <T: 45 min> Is that something that you missed?

JONES: Yeah, yeah, sure. In the early days you could sort of pretend you still were a scientist because you had maybe a technician in the lab, you could run back when things got bad. When you get tired of the corporate nonsense you run back and design an experiment. It probably wasn't very useful. It was probably a waste of a resource, but they did that to a lot of us, Kirby had a small lab too. And then there was sort of that day when we all got promoted, Kirby, myself, and they said, "Now you're running operations" and "you're running clinical development, Kirby. You're in an office now, get to work." So then I became a VP.

JONES: By that point you felt you knew how to do it, you could do it?

FENTON: Yeah, I knew that at Amgen I could get things done. I knew how the ropes worked and how to work the system as Amgen had developed it.

JONES: So you're inside the system from the very beginning.

FENTON: I'm inside the system and it turned out, I guess, that I was reasonably efficient at managing people. It wasn't something I was trained to do, but I learned it. In fact now there's a university, as a side note, called Keck Graduate Institute down in Claremont, I suppose I'm involved with it. We teach these kids what the business of science is and I give lectures. I'm on the board and I say, "Look, I've made every stupid mistake, and we're going to take you and we're going to teach you so you don't make all the mistakes I made and other people who, you know, we're doing this learning by doing."

JONES: Tell me about some of your stupid mistakes.

FENTON: All right, stupid mistake number one. These are ones that will not make it onto the article, but maybe you could, maybe you could. Yeah, go ahead.

JONES: It's up to you entirely.

FENTON: No, no, but you'll like this one. George Rathmann makes me an offer. My wife says, "You know, that's not enough. We need a little more money. California is expensive." A lot of these kids, my coworkers, none of them had a job, they were all coming right from post-docs. I had a real job, I had a house, I had two acres of land and a home, come on. You know, we're looking at houses out here. So I said, "George, I need a ten-thousand-dollar signing bonus." He said, "We don't do signing bonus, but I'll tell you what, I'll give you ten thousand more shares. I'll double your share offering." I said, "You know, those shares are going to be wallpaper on my bathroom, George. I want some cash." Mistake number one, you know?

And then more serious ones, evaluating people, how to put a team together, how to lead a team and all that other management/leadership type stuff. You make a lot of those mistakes along the way. You know, hanging on to people too long and thinking you can change them when you can't, and sometimes you've got to just change your team.

JONES: Did you ever have success in changing people?

FENTON: No, very rarely, exactly, exactly. But when you're young you think you can do that. So I can change a person, you know? They're perfect except for this fatal flaw which keeps them from being effective, and it's kind of hard. And then later you realize, well, you're never going to turn an introverted scientist into a great leader of people if they can't do it. You can't change their personality. So you learn that. You've got to get the right people for the right job. So that's some of the dumb mistakes.

JONES: So as a VP, your life is very different, but you're happy running that.

FENTON: Yeah, happy. Amgen's growing, it's a lot of fun, you know, stocks starting to—stock went out. You've seen the stock chart, right? It goes out eighteen [dollars] and proceeds to sink to four [dollars].

JONES: Right, yeah.

FENTON: Right, so they weren't happy times back before then. And then EPO hits and then we start going back up.

JONES: Are you watching it? You've got share, you're in at the beginning so you've got shares. Are people at the beginning, are they watching that?

FENTON: Oh yeah, everyone's watching it. I mean we're all watching the share count, your shares' value going down, down, down, and it hit four dollars a share. I'll never forget the day it hit the lowest it ever hit, George Rathmann had the misfortune of having an all-staff meeting that day. He got a lot of tough questions and a lot of angry employees.

JONES: Well, is that also maybe a good motivator for everybody to work together?

FENTON: Well, yeah, and his words were—and I'll never forget them, and I've used them in boards I'm on now, I tell the CEO, "Use this. You know, no one is more upset than I am the stock is down. I own more than you do, so sit down and be quiet." And number two, "If we all do our job it'll go up, so how about we all go do our job and it will take care of itself. Stop worrying about it. Just do your job and that'll make it go up." There's a speech he gave us to go out, and some people gave up faith and left the company, but those of us who said, you know, ride it out and see where it goes, and luckily it did go up. So yeah, was it a happy time? Yeah, it was early nineties, late eighties, happy times. Epogen, Neupogen, company's growing, you're hiring people all the time. I'm building buildings all over the place, having fun building stuff, and the **<T: 50 min>** laboratories and things, that was fun. So that was good.

JONES: And then you make this left turn, right? This is out of the blue?

FENTON: Out of the blue.

JONES: It's not something that you had thought about?

FENTON: No, never thought about it. The head of sales and marketing, Paul Dawson, who is a pharmaceutical expert had built his team. And unfortunately he was on a ski trip and died of a heart attack. He had a bad heart and the altitude got him. So now they're leaderless, and Amgen had been growing into two camps, the suits and the scientists. And I was always—

JONES: Kind of in between, huh?

FENTON: You know, and I'm sort of a person who likes to learn something. So I didn't consider them suits, I didn't care if they wore suits and I didn't. I'd always be asking them questions, "How do you do? What's market research?" So I actually had some friends I played basketball with who were marketing guys. So I was sort of in both worlds, say, because I was

interested. Not that I was planning to become head of Sales and Marketing, but at meetings I'd actually ask them questions. And I guess Gordon noticed that I had interest in what they were doing.

He pulls me in his office one day, and he says, “Have you ever thought about being head of Sales and Marketing?” And I just looked at him, I said, “Did you have a stroke? Look at me, I'm in shorts, I have a tee-shirt and sneakers on. I don't own a suit. I can't become head of Sales and Marketing.” He goes, “You can buy a suit.” And, “Let me sleep on it.” Next day I said, “I could screw this all up. This is important stuff.” He said, “You won't. You'll be fine. I'll help you. We'll do it together.” I said, “What if I fail?” He said, “Don’t worry about it.” So I felt like he was going to be there to help me, and then again, I can learn a whole lot about something new. So I jumped, I tried it.

JONES: Yeah, that's a real unusual opportunity, even in biotech.

FENTON: Exactly. Oh then one more story. So I said, “Look, I can't go to my PhD advisor and be totally done with science.” He goes, “Okay, you can keep Process Development.” So my business card was Senior Vice President of Sales and Marketing and Process Development.

JONES: How long did you keep that? That sounds like a lot on your plate.

FENTON: It was a lot on my plate, and so divergent in interests. I had a couple of good guys who were in process development who were very self-sufficient, and they kept me informed either of what was going on over a beer, informally etcetera. But 99 percent of my effort was focused on so now what the hell Sales and Marketing is all about. That stayed right till the end, till I left Sales and Marketing, and I just went back to Process Development and got other stuff, went back into it on the operational side.

JONES: So Sales and Marketing—that was fun?

FENTON: It was the hardest thing I ever did. It was harder than my PhD.

JONES: It was so different.

FENTON: It was so different and required me to have so many new skillsets I had to develop. You know, public speaking, I could get by on, but you had to be good at it over there. Meeting customers, you had to be on all the time. You had to learn market segments and best pricing

with the federal government. There as just all sorts of nuances. And they spoke a foreign language, as far as I could tell, right? And I spoke a foreign language in the scientific background. But, you know, it worked. I continued to grow the drugs. Look at Amgen's history, there's a little bend in the curve. That was when I was in charge of Sales and Marketing. And then it went back up another point or two when they got a real head of Sales and Marketing in there. But it was probably 25 percent. You know, I can say, hey, during my two years in Sales and Marketing I went from three-hundred-million to 1.3 billion [dollars], that was pretty good—for a sales guy even, marketing guy.

JONES: What year was it?

FENTON: That was ’92 to ’95 about.

JONES: Okay, and so you've got both of the drugs on the market.

FENTON: And they're going full speed ahead.

JONES: And the J&J stuff is going on during this time?

FENTON: Yeah.

JONES: Did that affect you?

FENTON: Yeah, I as in the midst of that. I've been deposed so many times by their lawyers. We were in the middle of that war.

JONES: Could you give me a chronology of that whole episode? That would really help, because that's an important deal.

FENTON: Harry will be better than me because he was full on. Is Gordon willing to talk to you?

JONES: I haven't been able to get ahold of him.

FENTON: I'll see if I can get his email.

JONES: But see he's got his book, which I haven't read.

FENTON: The Science Lessons book?

JONES: Yeah. There's good stuff in there, his perspective.

FENTON: Yeah, okay, good, that's fine. He might be reluctant. He's a very polite person, he doesn't probably want to share any conflict. It was always perfect saying, right? He's one of those people. He probably doesn't want to get into the details. But **<T: 55 min>** J&J, he might. You know, we did the deal. George was—I remember the day we did the deal, I was drinking a beer and I thought it was a great thing, we got J&J money, another twenty-million [dollars] woohoo—and he said, "Amgen's a weaker company today than it was yesterday, Dennis." And I went, oh. It was a deal we had to do. He wasn't ever happy with it. We wanted to keep the US for all indications, and they kept negotiating. We were running out of money, so George had a gun to his head and had to sign the deal.

JONES: That's where that split market came.

FENTON: Right. They were of absolutely no help whatsoever, they were nothing but an impediment to us marching our way into good dialysis for EPO. They told us we couldn't do what we said we were going to do. They repeatedly told us we couldn't do it. And then when we did it, they sued us.

JONES: What do you mean, they said you couldn't do it, they would not permit it or—

FENTON: They were saying it was impossible, the timelines we were laying out, to march ourselves through a clinical trial and get the drug approved. They said the FDA will never, you know—but these guys were just big pharma guys, they moved in glacial speed. They didn't understand Amgen that we didn't need a lot of meetings, we just said, "We're going to go do this." And everybody ran off and did it, right? And we got the clinical trial, we got it approved. And then if you look at the chronology, when we got it approved they sued us, [inaudible] and the FDA for collusion. They kept this drug off the market for several months while we litigated, that's how evil. I'll say it, evil, those people were. I'm talking about business, but this was beyond business with them.

Then it was really bad. A lot of us took every J&J product we had out of our house, really. There'd be no J&J bandages. Some of us—Mike Downing—he'll go off and he'll tell you lots of stuff. George used to have, there'd be a meeting and there'd be like a vase in the center, and if you complained about J&J you had to put, like, five dollars in the vase, and that was the deal. We all could sit there and complain all day, but that didn't get it done, so you just had to keep working. So it was a very difficult working relationship. Now I was supplying them the drug before and after. I was in charge of manufacturing. So you can imagine, they rely on us for their drug.

JONES: And was it the case always you were doing?

FENTON: [Yes].

JONES: Amgen was manufacturing for them? There was never any transfer of technology?

FENTON: They did build their own plant in Puerto Rico for manufacturing ex-US, and helped them start that facility.

JONES: Did they know anything about this stuff?

FENTON: Well, some of them did. In the beginning, no. I'd say beginning no. I had no one on the other side. But then they bought Centocor, and real grown-ups showed up that I could talk to, and that was a big change. When the Centocor people showed up, they knew what was going on and tried to fix the plant that they were running, because they had trouble running their plant to supply the rest of the world.

JONES: And Centocor had experience with biologicals but J&J didn't?

FENTON: Correct. […]

JONES: So you must be very worried about the market during this period?

FENTON: Right, and they were selling into our market and trying to steal our market share, and that was cause of much arbitration battles and lots of checks going back and forth as we

sold into their market and they sold into our market. IMS, you know that group that tracks—made millions of dollars off of our legal battles.

JONES: Because you're paying them to track all of it.

FENTON: To track everything. **<T: 60 min>**And the hospitals don't care. They don't care. They're going to buy either Ebren or Epogen, they don't want to keep both of them on the shelf, and they're going to use them where they use them. And then you have to track where it ends up. So it was a flawed concept to begin with. It just wasn't going to work. Even under the best of circumstances, and given the two corporations ended up hating each other, it just made it impossible.

JONES: And you were deposed, you had to go testify?

FENTON: Yeah, there was a lot of minor—a lot of skirmishes and a lot of battles and poor people like Jeff Brown lived with the lawyers, and I think you got his email? I hope, I don't have it.

JONES: I haven't been in touch with him, but I'll track him down.

FENTON: He's a guy, see if you can get him, because he lived the J&J war. That became his life, that poor guy.

JONES: It was his job.

FENTON: He started out as the team leader for Epogen, you know, the first team, and he got it approved, all this wonderful stuff, and then he spent the rest of his life fighting either the patent wars or the J&J wars. And the poor guy, it just burned him out. It was tough. He retired early because it was no fun what he was doing.

JONES: Well, it's interesting. I mean, Amgen turns out to be, of all the biotech companies, the biggest and most successful because of these two records, and if you hadn't have had this weight along the way, I mean it would have been even—you know, that was a big diversion, right? It distracts.

FENTON: Right, absolute big diversion, big distraction. You *could* say, and I thought it at the time, said the Bowsen/J&J confused everybody on the outside so much that you never got acquired because of it, you know.

JONES: Yeah, nobody's going to pick you up when—

FENTON: It's sort of a mess that they don't want to deal with. So it might have in a way been a little armament against if there is a hostile takeover.

JONES: Yeah, I hadn't thought about that before.

FENTON: I wondered about that because—

JONES: Was there talk about that?

FENTON: Not so much internally, but I just wonder why no one took Amgen out. I mean, we had these two drugs growing at this tremendous growth rate. Well, first the patent's unclear, all right, so let's wait and see who wins the patent war. Once we won the patent war, why didn't somebody buy it? I can't explain it. So it must have been they just looked at it and said, "They had a fight with J&J, I wonder what this, you know, we've got to take that litigation on, and what does it really mean?" It must have been it made us look a little ugly as an acquisition.

JONES: And maybe George Rathmann leaving had also—

FENTON: Maybe. I mean, these were two cash cows—maybe they just never believed they were going to grow to the size that they did.

JONES: Did you know where they were going to go?

FENTON: No, I remember the first poor guy, he passed away, named Phil Whitcomb, one of Amgen's early employees, he was sort of a marketing department before there was a marketing part, business development, and his first analysis of the EPO market—

JONES: He was a science guy though.

FENTON: He was, but he ended up sort of in business development in the company in the early days. He was never at the lab bench. He knew George from Abbott days. Actually, he was the one who got George involved in Amgen, was Phil Whitcomb. Phil was out here working with Winston Salser, who was one of the first SAB members, and the guy that the first venture capitalists approached was Winston.

JONES: Yeah, I talked to Winston and I heard all kinds of stuff about him. What was your experience with him?

FENTON: I only met him once, and he was a character. And as George said, half the people wouldn't come to the company because he was involved, so that's why they kind of separated ways. He left very early. I only met him maybe once. Yeah, he was quite a character. He makes it into the *LA Times* a lot, or at least he used to, because he used to run around and pick up all the open house signs and throw them in the trunk, and he had a whole garage full of them. He just didn't like them. Then he wouldn't let the Boy Scouts who had been crossing this piece of land to their campsites, cross it anymore, he stopped them from doing it. So he made the *LA Times* a lot for being a grump.

JONES: Okay, that's interesting.

FENTON: Yeah, just on the side. He was a strange guy not only at Amgen, at other places.

JONES: Well, you're VP of Sales and Marketing from ’92?

FENTON: I'd say three years, ’92 to ’95. And then the head of—

JONES: But the J&J thing is not resolved?

FENTON: No, no, not resolved at all, it continues.

JONES: Until what?

FENTON: Yeah, in ’99 it continues, the wars continue.

JONES: So you got out of that.

FENTON: I got out of sales and marketing. You know, I said it was hard, it wasn't natural for me. My wife said I was grumpy and my son said I was grumpy all the time, I think I was.

JONES: Were you worried that you're not really doing this right?

FENTON: It just wasn't fun. It just wasn't fun like, you know, **<T: 65 min>** the Ops side, building buildings, building labs, running production. It was real data, you know, you can measure. Sales, data was just—I never enjoyed it as much as a true sales and marketing guy does when you sell something, it's sort of like, "Okay, yeah, we've got to do this, but it doesn't make me get up in the morning." So when the head of the Ops side, this guy Bob Andren, he decided to retire, Kevin Sharer was then here as the President and as my boss. We looked at each other and said, you know, "I'd be a lot happier doing that job again."

JONES: You said that to him, or he said that to you?

FENTON: Well, we said it to each other. No, it wasn't like—he said, "You can stay," he didn't fire me, "you can stay," but I said, "No, when we go over there we can hire a real head of sales and marketing, somebody from the pharma business." And if you recall, my job was to try and bridge the gap between the two parts, and I think that was by and large done. Maybe because I was there, or maybe because Amgen just sort of grew up and realized sales and marketing had a role in the company. And I was never going to be a great sales and marketing guy, so I went back to the other side, to the Ops side, and we hired in Stan Benson, he was from Pfizer, to run sales and marketing.

JONES: So '95, '96. Then you go back to Operations, what did you do then? It was different—

FENTON: It was different. There were more products, a lot more to go, much bigger, and the big push for say the last ten years of my career at Amgen was we're moving our production processes offshore to Puerto Rico to get into better tax rates. So I had to take all that technology and put it in a low infrastructure environment, and we built a huge manufacturing plant down in Puerto Rico. It's still there and it's still running fine, and Amgen has a low tax rate because of it.

JONES: Yeah, but there are all kinds of challenges with that, right?

FENTON: Oh yeah.

JONES: If you're moving the technology, how do you do that? Are you moving people?

FENTON: Right. We did it with a lot of expats. We had about twenty or thirty expats, friends of mine I convinced to go down there and have an adventure in the Caribbean and help me do this. We started with a small fill finish plant which we put in right when EPO was approved. But there was [Section] 936, remember that tax code thing? There was a tax code that they took away. So that wasn't so valuable anymore. But they created new tax incentives, so you had to get more of your production down there to get the incentives. So we had to actually start making the bulk as well as fill finish it there. And the tax guys, the lawyers, were all very good at that. My job was just to move this technology down there and build large manufacturing plants to make it work.

JONES: Yeah, but that's difficult.

FENTON: Yeah—no, but it was more of—

JONES: What kind of problems did you run into? You don't have trained people.

FENTON: You don't have trained people, you have to hire them, you have to train them, you have to do joint ventures with the government in terms of having universities start training students in the technology you want them to, so there's a lot of schmoozing with government people. And then the challenges of actually building the plants and getting them up and running and getting them started. So it's like a seven-year major project. And so that was sort of like mainly what I did during the last ten years.

JONES: Did you run into cultural—

FENTON: Yeah, cultural issues, you know, they're not like Amgen people. They tend to be a little bit more circumspect in their communication style and you have to kind of figure out what's going on. And then we also bought Immunex, and that was a big challenge to figure out, like Enbrel. Walk into Rhode Island and fix that plant and make it work.

JONES: Were they having problems with it?

FENTON: Yeah, they couldn't supply. If you recall what happened to Immunex was, they couldn't supply Enbrel to patients, there were long waiting lists, and stock got depressed. So we came in and we took it over. Took our expertise and fixed the manufacturing problems and it turned out to be a really good acquisition for Amgen and great for the patients, they can get the drug now.

JONES: So were you involved in evaluating that acquisition?

FENTON: Yes, they gave me one whole day to go look at the plant. So I took a look at it and said, yeah, this one isn't very well put together or well run, just from a one-day assessment. That was enough for Kevin, I guess. He decided to make the jump and buy it.

JONES: That wasn't their first product, they had done other stuff, right?

FENTON: They had one very small product called Leukine, which we had crushed in the marketplace with Neupogen. They had GM-CSF, and that was like a fifty-million-dollar product, a hundred, that's all they had was that, and then they had Enbrel. And Enbrel, they had a hundred-thousand people on the waiting list, they couldn't make it. **<T: 70 min>** The plant just wouldn't operate.

JONES: So what did you have to do to fix that?

FENTON: Bring in basic procedures, blocking, tackling, nothing brilliant. I took my best people and convinced them that they wanted to go live in Rhode Island. I had to drink a lot of tequila to convince people, "Please go. . ." After I took a lot of people and sent them to Puerto Rico, they were looking forward to getting back. It was like World War I and II, you know, you've got another war you've got to go to Rhode Island now and get that plant going. And the people at Immunex were good, they just didn't have the experience, they just were sort of thrown into this.

JONES: Did you keep a lot of them?

FENTON: Not too many. Not that many. Some of them. I mean, there was probably a hundred people, probably twenty or thirty still working there, but a lot of them just didn't want to adapt

to the new culture. New cultures, you've got to care, and Rhode Island is, sort of, say a union environment, sort of a union mentality about the job.

JONES: Amgen had made some other acquisitions by then?

FENTON: Yeah, bought Synergen.

JONES: And that was Boulder, right?

FENTON: That was Boulder. And it's a funny anecdote. There was a number of people on the ops side I really wanted to keep, and I worked personally very hard. And this was when I was in sales and marketing, I learned how to sell. So I went and sold Amgen to those few people. I said, "You've got to stay with us." And those guys became vice presidents in my organization in operations. They were better than the people I had. So we acquired and integrated and they won, okay? And I put them in charge of the integration of Immunex. Because I said, "You were always telling me what I did wrong before when I acquired you guys, now you're in charge of integrating those guys." And they went and did a very nice job of integrating Immunex.

JONES: You just said the Synergen didn't go so well, what didn't go so well?

FENTON: People were very unhappy. Well, first technology. The drugs didn't work that we acquired them for. But the people we acquired on the operations side were very, very good, because they were making much larger quantities of protein than I was. The drugs they had were like BVNF and IL1RA. The point is, they could make hundreds of kilograms and I was still in the ten-kilogram-range of stuff, and they knew how to make it bigger. So I acquired them and kept them. And it didn't go well because they didn't feel respected as we were acquiring them. They just sort of felt. . .

JONES: Even these ops guys, you were telling them how you're great in how you're doing what you're doing.

FENTON: Yeah, but the rest of Amgen was let's say, not as nice to them, not as understanding. It was a takeover. It was an integration of best practices. I could say the speech but that doesn't mean that's what happened in the trenches as much as I wanted to.

JONES: What were they doing? What did they know? How are they getting these kinds of volumes?

FENTON: Well, they had faced a challenge before we did and had hired some very good chemical engineers and some very good biologists who had worked together successfully as a team in process development, and these guys were better than the people I had working on some of it. And also Amgen at the time, the stock was up a lot, people were coming into work in their Ferraris and sort of resting investing. You get a lot of that, as you know, in biotech companies, or in any company when they make it. Some of the people like myself, it didn't change the way I attacked my job. Other people kind of went, "Oh, I'm rich now, I'll just sit here another year and I'll get another million dollars in stock options." There was a time when people were more hungry involved.

JONES: So during the last ten years, you've got Puerto Rico, Rhode Island, and you spent a lot of time in those places?

FENTON: Yes.

JONES: Was that fun or did it get to be a drag?

FENTON: That was fun, it was still fun, and then we started a distribution center in the Netherlands, which was labeling and packaging, that was a lot of fun.

JONES: What was the big product that was going in?

FENTON: Well, we were moving all our products, Neupogen. Aranesp came to Europe, so all our products, we acquired that back from Roche, it was a five-year deal, so we had to figure out how to distribute our products in Europe, which is a whole different world than here, as you know. You don't have Berg & Brunswick, bit wholesalers who ship into all these countries. So we decided to build one distribution center in the Netherlands, which at the time, not too many people were doing it, and we distributed out of there.

JONES: How did that work?

FENTON: It worked great, still working today, it's working great.

JONES: Netherlands is a better choice than Belgium or France—

FENTON: Netherlands was great, it was a perfect choice. Belgians, they're fighting with each other right now and they're in the paper, and the Dutch are very practical people and they get things done, the government and the individuals who worked at Amgen.

JONES: **<T: 75 min>** So you're at Amgen for twenty-seven years?

FENTON: Right.

JONES: Towards the end of that, you're still a young guy, relatively speaking, you're not finished.

FENTON: I was going to retire. It's okay to admit that, you get tired. People talk about Amgen years, you know, every year at Amgen is like five years working somewhere else. I'm sure a lot of intense places say that. I was getting tired, the place was changing a lot, even more. Turning more to a pharmaceutical type environment.

JONES: And what did that mean for you?

FENTON: For me it meant I spent all my times in meetings and not anywhere near the technology or the people I was leading. You gave your speech at the podium and they got in your corporate jet, Amgen's private jet, and flew home. I didn't have time to spend any time with the leadership of places. You do an operating review, okay, fine, and you leave. I used to go and hang and wander around and get to know people. So it wasn't fun. And then Amgen was going through a down and I was going to have to start firing a lot of people. Frankly, I just didn't have the stomach for it.

JONES: You saw that coming, and you hadn't had to do that before?

FENTON: You know, I did, but—

JONES: You did a little bit of it, right?

FENTON: You did here and there, you did some of it, sure, I had no problem letting people go who weren't good or if I had to downsize by 3 percent, okay. You know, your stack link and you figure out, but this was going to be something different. And that's when Amgen went through its major shrinkage, and I just didn't have the energy for that. I told Kevin, I said, "Look, I'm not having fun, and this isn't going to be fun, and I don't have to work, so I'm going to go." So we parted on—Amgen and I walked away on very good terms. I hung around and helped the transition, a guy who worked for me, so that was fine, one of my staff got the job and he did a great job after I left, so somebody I worked with.

JONES: Right, well, you're tired, and what are you thinking? What's next? Did you have a plan?

FENTON: I thought about going to work for real, but I had some fun. Slip going next week to St. Thomas scuba diving, that was fun. And then I started doing corporate boards. I had done one corporate board when I was at Amgen, Avaron, and then I said, this is sort of fun, you're kind of working but you're not. There's not a lot of stress involved. Unfortunately the poor CEOs have more stress and I'm there to help them. I sit on five corporate boards now, five public boards.

JONES: And you feel like you make a good contribution by virtue of your [inaudible] experience.

FENTON: Exactly. I always say I've made a lot of mistakes, let me help you. Let me see if I can help you not make those mistakes.

JONES: Anything particularly interesting, problems that you run into with these companies?

FENTON: Well, you can look up there—Dendreon is going through some major challenges right now, I'm on Dendreon's board. I'm on a company called Zeno's board, it's got challenges. A company called Titera just went public, and it's got Betenol, and that's in the cosmeceutical space, facial contouring, something very different, but a friend of mine from Amgen started it. It's like old Amgen when I go back there, so that's fun, I'm lead director there. And I'm on also Oscura board, which is a large company, and I'm enjoying working with those large issues again like Amgen had, the big people issues and investment issues. So yeah, it's fun. Working a day or two a week is just perfect.

JONES: It that what it is?

FENTON: Yeah. A lot of weekdays.

JONES: What do you do with the rest of the time?

FENTON: Live in Malibu. I love the water. I surf, I scuba dive, I hit the gym a lot. I rest, I read, I travel. My wife and I like to travel.

JONES: So when you came out here, where did you live originally? Were you up in Thousand Oaks?

FENTON: I was up in Thousand Oaks, yeah. We lived around there, and when I retired my wife thought it was best, and she was right, you know, to get a little distance from the place. So we moved to Santa Barbara for a little while, and didn't stick up there that well. So then basically then moved to my beach house, which is on the water down here, and spend most of the time there. So for now I have a house on the beach here, which I spend all summer at, a house in Santa Barbara I visit occasionally, it's a small town home, and then we just bought a house back up in Thousand Oaks. Why? Because that's where all our friends are. I'm probably the only guy whose got three houses in one area code. Amgen's been very good to me.

JONES: And your friends are probably a lot of Amgen people?

FENTON: Correct.

JONES: There's an Amgen community.

FENTON: There's a lot of us **<T: 80 min>** retired, so we go hiking. You say what do I do, what am I doing tomorrow, I'm going hiking for eight hours with a couple of retired Amgen guys.

JONES: Where you going?

FENTON: Oh these mountains around are fantastic for hikes, they're just great. And some of them are still working, the younger guys. I was hanging on yesterday with two guys that are

working and had a good time. So I have a large personal network of Amgen former and current employees.

JONES: Well, have we covered everything?

FENTON: You know, I always feel I don't do justice to such a great company. I don't know what you're going to sort of talk about the early days I imagine more. By the way, I didn't start by saying I very much enjoy your magazine. I love it. I read it and it's balanced, it's messy. It's not like here's some corporate story about Hybridtech and it's—a lot of disagreement, and you're actually right, people have differing memories of this. This is what this guy said, this is what that guy said, the truth is somewhere in here. So I really love the way you lay it out. It's not pretty and it's not perfect and we don't have a perfect record.

JONES: It's what we're aiming for. It gets a little uncomfortable sometimes when people know the truth and there are two or three different truths. We have to negotiate that.

FENTON: Honestly, everyone sits there, and you know better, you're a writer, so we all have our version of what happened, and we reinforce it in our brain over twenty years. What really happened in that meeting? I don't even know. I mean, I know what I think, but somebody else might say something different.

JONES: And so we have to get multiple accounts.

FENTON: You have to, and I really enjoy that. I saw Alan Mendelsohn, I saw he was on it, and I'm on a number of boards with him, and cleaning the scripts down in San Diego, not for profit. And I said, "Alan, there's no one from Amgen here, what the heck's going on?" And he said, "Well, you could be. You want to get involved?" So I made a small donation and I'm glad you guys are going to write the Amgen story at some point.

JONES: Great.

FENTON: So are you based in San Francisco?

JONES: Yeah, we're in San Francisco. Which is a good place to be.

FENTON: It is, biotech cover of the universe.

JONES: Right, and we can get down here to Thousand Oaks, San Diego, it's just a flight away. Going to Boston is a little. . .

FENTON: It'll be harder for Genzyme and those early stories. The only question you didn't ask me, but I'm sure Kirby will come up with the same answer if you ask him, why is Amgen in Thousand Oaks?

JONES: I think I've heard, and I forgot who, it had something to do I think with the Caltech guys?

FENTON: Exactly.

JONES: Go ahead, give me your story.

FENTON: Exactly, so Bruce Wallis, the first employee unfortunately who passed away in a hang-gliding accident, I came and I said, I've known this area, I've stopped at Newberry Park for lunch on one of my vacations. I said this is a nice place. It was really rural back then. I went to the beach here, pretty close. I was like, "Why are you here, Bruce?" And he's the guy who picked it. He said, "Well, I had three powerful SAB members—one in Santa Barbara, one in UCLA, and one in Caltech, and everybody wanted it next to their campus. This is exactly fifty miles from all three of them." So literally, and he predates George Rathmann's decision.

He and Winston said, "Okay, we'll put it right in the middle," and they found Thousand Oaks. And that's it, that's the only reason. And to think back to it, when people weren't happy at Amgen, which happens in all companies, and you're up in the Bay Area, you just say screw to your boss, drive the other direction and get another job. Your kids don't change schools, nobody moves. Here, you are in. Your wife says, "Go back to work and make it work because I'm not moving the kids, they're in high school," or whatever. So it was hard to attract people, but once you got them, you had them.

JONES: Well, that's interesting. I imagine there have been plenty of companies sort of spun out of Amgen.

FENTON: Not many, that's funny.

JONES: Some people have gone on to do some stuff, have any been located?

FENTON: If you look, we have spun out almost no companies, and the only one of the few is this company called Kythera. And the venture capitalist asked me, he said, "What is it about the culture at Amgen?" Unlike Genentech, I said, because, you know, usually you go to some venture capitalists and they say, "Okay, we'll start a company, you've got to move to San Francisco," and no one wanted to move. So you went back to work at Amgen, because you said, "I can't move." And then when guys left Amgen, we had done well enough the first thousand of us that no one had to work anymore, and there were very few guys who wanted to take on the challenge. **<T: 85 min>** So Kythera, as far as I know, is the only spinout of Amgen people, and that is because the CEO, Keith Leonard, insisted, he didn't want to move either, so he insisted—

JONES: So it's here?

FENTON: It's here. It's Calabasas, right up at the top of the road here, and he insisted to stay close. So Amgen hasn't been very good at spinning out stuff. I don't know if it's cultural, we all got lazy and didn't want to do new things after we got done, or usually the venture capitalists don't like to travel down here, they want to stay up in San Francisco or Boston or something.

JONES: I know it's a problem down in San Diego. They put a lot of companies there but it's tough because the capital isn't there really.

FENTON: Right. I was on a small board of a company in Santa Barbara. Great company, technology out of UCSB, and the VCs came in and they said, "Okay, item number one, we'll make an investment, you're moving." I was like, wait a minute, you can build a company, you can't build a company. I said, well, they did, right over there in Thousand Oaks, what makes you think you can't do it here? "It's too hard to get here," is what they said. "You've got to make a connection through LAX, I'm not doing that." So they moved it to San Francisco. So maybe that was it.

JONES: Well, thank you, Dennis.

FENTON: Oh, you're welcome. Happy to chat with you any time, also to assist making connections. Mike Downing you were interested, he'd be good on the J&J wars. Jeff Brown lived them, and he's the guy you've got to talk to. And I've lost his contact information.

JONES: We'll find it.

FENTON: Bob Andren might have it. I'm going to send out some emails now. Who else do you need? Brown, Downing—send me an email, because then I'll just keep iterating against my friends and somebody will have those two guys. And if there's anybody else you want me to connect with. Larry Souza, everybody's lost contact with him so I can't help you with that.

JONES: I'll keep after him.

FENTON: And he'll have his own view, it'll be very different than everybody else's. He'll have his own strong view.

JONES: Good, all right.

FENTON: I'll let you make your flight.

JONES: All right, well, we'll get a transcript back to you—

FENTON: So I can listen to the babbling, yes.

JONES: You can do whatever you want with it, you know, add delete, correct, whatever.

FENTON: When's your plane?

JONES: At 7 o'clock, so I've got plenty of time. And we're also writing a book, it will be about the origins of the industry up till about—1990 when it got the beginnings of this thing—around 1990 is when, okay, yeah, it's here to stay, and a lot of it has to do with these two drugs from Amgen. But that's the book, and of course Andrew's going to be a big part of that. I'll send it to you and you can review it. No obligation.

FENTON: I'd love to, again, I've got plenty of time now. We've got to get the history of this thing right. People will make it up if we don't write it down, right?

JONES: That's right.

FENTON: So I think it's really important. So you know Pitch Johnson, you talked to him, because I know Pitch well and he'll happily chat with you. And I guess Bill is not well.

JONES: So we've talked to Bill.

FENTON: I haven't talked to him in a while. Okay, those two guys obviously were huge in Amgen's history. They were on the board for a long time so I had the honor and privilege of getting to know them.

JONES: Do you have any stories about those guys, that they were influential?

FENTON: They were there.

JONES: Were they a presence?

FENTON: They were a presence.

JONES: How did they work with George Rathmann?

FENTON: Well, I believe. At that point in my career I was in and out of board meetings. You go in, you do your spiel and you're out the door. Go get the money and run, make a presentation. But when I got to be senior vice president, they were still active board members, they were still a presence to be dealt with and they were leaders of that board. And Pitch stayed on for a long time. Even extended the retirement age for him. They were a very stabilizing influence. You hit rough patches all over the place and those guys have seen the ups and downs of so many companies and they were always like, “You'll get through this, just forge ahead.” Too bad you can't interview George for this, it's a shame.

JONES: There is a good oral history. I'll send it to you, because it's a great thing. Sally Smith Hughes is an historian at UC Berkeley, she did an oral history of George Rathmann, it's a great document, I'll send it to you.

FENTON: I am intensely unhappy that Amgen wouldn't give you the oral histories that we all did.

JONES: Well, I think it's just a matter of formatting. I guess they're on Betamax tapes or something.

FENTON: Oh, is that what it was? I thought they were afraid there was going to be something in there that they didn't want heard.

JONES: No, I don't **<T: 90 min>** think so. I think we'll get to them eventually, but it's good for us to sit down with people.

FENTON: I was the principle guy on that twenty-fifth book, and it was fun doing that, but let's just say, not all the issues were fully explored, it was the corporate version so we had to be careful. But the oral histories would probably give you a lot more nitty-gritty. I know they would because I heard them and I was helping Duncan write it.

JONES: Oh right, Dave Duncan.

FENTON: You know him?

JONES: I met him.

FENTON: I was helping him write it. He had to leave some of the juicier parts out, but you can put them in.

JONES: Right.

FENTON: Amgen's not paying.

JONES: Thanks, Dennis, great story. We'll be in touch with you.

[END OF AUDIO, FILE 1.1]

[END OF INTERVIEW]