SCIENCE HISTORY INSTITUTE

GARREN BOHLIN

Transcript of a Research Interview Conducted by

Mark Jones

Via telephone

on

25 September 2012

(With Subsequent Corrections and Additions)

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Garren Bohlin, interview by Mark Jones Via telephone, 25 September 2012 (Philadelphia: Science History Institute, Research Interview Transcript # 0019).



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INTERVIEWEE

Garren Bohlin was a partner at Arthur Anderson LLP in 1980, where he did general business consulting. He was contacted by Mirza Mehdi of the Genetics Institute, who worked with Gabriel Schmergel. Mehdi asked Bohlin if he would be his replacement as vice president at Genetics Institute. Wanting to leave public accounting for industry, Bohlin joined Genetics Institute in December of 1983. When Bohlin came to the company, there was no clear business plan and Genetics Institute was working and developing products in many different areas. Genetics Institute went public in 1986 with a valuation of seventy-five million. While vice president, Bohlin oversaw the deal with American Home Products as well as Burroughs Wellcome Fund. The latter deal produced WellGen Inc, a commercial scale biologics manufacturing facility in Providence, Rhode Island. Bohlin also oversaw Genetics Institute's partnerships with Chugai Pharmaceutical Company Ltd and Boehringer Mannheim. In 1996, American Home Products purchased Genetics Institute, a deal that Bohlin supported, though he was uncertain about his future at the company. He remained at Genetics Institute for one more year, before he left to become a founding member and CEO of the pharmaceutical company Syntonix.

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.

PROJECT

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

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availability of online full-text searching of our transcripts, the Center for Oral History opted to discontinue the practice of preparing a back-of-the-book index for each oral history transcript in 2020. The Science History Institute is committed to the responsible presentation of the history of science by addressing evidence of inequality and oppression as well as the subsequent silences in our collections. To that end, we recognize there may be language in our oral history collection that is outdated, offensive, or harmful, such as, but not limited to, the following: racist, sexist, Eurocentric, ableist, and/or homophobic language or depictions.

INTERVIEWEE: Garren Bohlin

INTERVIEWER: Mark Jones

LOCATION: Via telephone

DATE: 25 September 2012

BOHLIN: Hi. It's Garren Bohlin.

JONES: Hi, Garren. Mark Jones calling from the Life Sciences Foundation [LSF].

BOHLIN: Hey, Mark. How you doing?

JONES: Very good. Thanks for taking time out for this. We're writing the history of the origins of the biotech industry, and of course Genetics Institute is a big part of that, so we'd like to get your perspective on the history of the company over time. So maybe we could start out just getting a little bit of background of how you got involved with the company. You were at Arthur Andersen [LLP] and a partner in 1980. Right?

BOHLIN: That's right. Actually I was contacted by an individual who came to GI with Gabe Schmergel from Baxter [International Inc.] named Mirza Mehdi. He was the initial—he was kind of initially Gabe's right hand business guy. Mirza joined right at the onset with Gabe, and decided after a couple years that—I believe he was more interested in moving over into the hightech field. Gabe had said, "That's fine. See if you can find me a replacement." I had worked with Mirza at Arthur Andersen. In fact he worked for me on an engagement or two there, so I guess he thought of me, contacted me. It was right around the time I was thinking about leaving public accounting and getting out into industry. So timing wise it was a precipitous call. I wound up coming out here three or four times talking to Gabe and others at the company, which I think was only about thirty people at the time I was interviewing, and basically a bunch of scientists, Gabe, Mirza and a couple admins. I never really had a particular interest in science or healthcare, but the whole situation was fairly intriguing to me. I also knew that Boston, [Massachusetts] was very entrepreneurial community. I figured why now give it a shot? If it doesn't work, there'd be a lot of other opportunities out there. I wound up joining the company in December of 1983.

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¹ Gabriel Schmergel, interview by Arnold Thackray, Cassandra Stokes, and Mark Jones on 15 December 2011 and 18 September 2012 at Boston, Massachusetts and via phone (Philadelphia: Chemical Heritage Foundation, Oral History Transcript #1035, in process).

JONES: Well let me ask you a couple of questions about this progression. First of all, your decision to leave public accounting to what was your idea there? What prompted that?

BOHLIN: I think I had been at Arthur Andersen for thirteen years and it was a great place to work, worked with great people inside the firm, had great clients. But I was just ready to do something outside of the client service specter. At the time I got this call I was just starting to think about doing some looking around, putting out some feelers, and the call kind of preempted all that. So I never wound up looking at anything else.

JONES: I see. So you wanted to do something operational.

BOHLIN: Yeah. I think. A lot of what I did at Arthur Andersen while I was in the audit division. I had a couple clients that were very heavy into M&A [mergers and acquisitions]. I wound up doing a lot of what's called general business consulting. It was one of those things where you kind of wind up getting involved in specific projects or areas. You provide your advice and then you wind up walking away. It never gets kind of year round in the environment and enjoy kind of the fruits of the consulting. I think it was more a—yeah, more a matter of getting into an operating environment where I could feel, like I was going to be an ongoing part of a team and creating value in the enterprise that I was working in.

JONES: Right. And the GI opportunity was intriguing. What about it really caught your interest or made it seem like, "Yeah. This is the right way to go?"

BOHLIN: I think it was the fact that it looked like there were going to be a broad range of opportunities in biotechnology, but frankly, it was somewhat of a—it was a little bit like throwing darts at the time because it was pretty early days. But I just thought the idea of finding new ways to deliver in the therapeutic health care field sounded interesting to me. I hadn't worked in a scientifically based environment, even in a consulting role at Arthur Andersen. So it was the idea of a new field that looked like it had some real potential that if it <**T: 05 min>** was successful was going to be able to deliver something that could be very important.

JONES: Do you remember, if you can put yourself back into that context and maybe what you're aware of or not aware of at that time. Genentech [Inc.] had gone public. I mean was that on your radar screen anywhere, the fact that there was some demonstration?

BOHLIN: It really wasn't. I was aware that it was still a pretty small field at that point in time. You could probably count the number of companies on two hands. I had some general

awareness of the players in the field, but I didn't really get up to speed on that until after I was in and up and going at GI.

JONES: Right. Did you perceive any risk in making this career shift?

BOHLIN: Absolutely. My wife was ready to kill me at the time. [laughter] Because I had worked for a long time, had worked very hard to make partner at Arthur Andersen, was finally making some money. I had a little bit more control over my schedule. She and I are both from the Chicago, [Illinois] area. All the roots were there; all the friends were there. We didn't have any friends in Boston. So yeah, I perceived a risk. But as I said before, I just felt that Boston, again, was an entrepreneurial community. There would be opportunities, if for some reason GI didn't work out, to bounce into something else. I got a little bit of a flavor for the Boston community, because I did an internal working review when I was at Arthur Andersen of our Boston office. The Arthur Andersen Boston office. And they had a very strong practice in Boston at that point in time. I knew a few people there, so there were some connections. But yeah, I perceived that there were some risks.

But they were risks that—you know, I was in my early thirties at the time and I just figured if for some reason things didn't work at GI there are other companies, other industries and other opportunities to look at.

JONES: Yeah. And you were persuaded that the folks at GI were a fair enough bet. Gabe Schmergel. And who else did you talk to when you're deciding to make the move?

BOHLIN: Well I think Gabe was the principle influencer, internally, but the company also had a pretty decent range of blue chip relationships at that point in time. The board was a pretty strong and savvy board. With key people from [J.H.] Whitney [& Company], Greylock [Partners], and Venrock on the board. GI had worked with Morgan Stanley [& Company] on a private placement that was completed just before I got there, working with top attorneys, at the time Hale and Dorr, now WilmerHale [Wilmer Cutler Pickering Hale and door LLP] in Boston. Two founders had a good reputation at that point in time also.

It's like a lot of things. For me it's important to be working with good people, people that I felt I could learn from, and also that I think were respected in their own professions, and that dealt on a fair and level way. Everything that I had been able to glean from a diligence point of view on Gabe and the, kind of, the outside advisors that were associated with GI was very positive.

JONES: When you arrive at GI and you're surveying the landscape. What was there for you to do? You formulate a plan when you arrive and I presume, in conjunction with Gabe and others. But what were the needs of the company at the time?

BOHLIN: So I think there were a couple things. The company didn't really per se have a business plan at that stage. I mean we were working in a lot of different areas. We were working in the therapeutic area, drug deliver area. We were doing some stuff in agriculture. We were doing some things in the enzymatic area. And it was pretty clear that I think the company was going to have to start to develop some focus and develop a more structured business plan.

I thought that was a great opportunity to get in and learn as much as I could, as quickly as I could about what the thinking was to that point in time, that the company was doing at that point in time, and work together with people inside the company, and as needed, outsiders to help formulate, not a definitive the type of definitive business plan as you would do for an operating company that had products and revenues, but something that tightened it up a little bit in terms of what we were going to have to do going forward. The other thing was <T: 10 min> it was a very light organization, at that point in time. There were going to be I think challenges of, "How do you build it out? What types of people do we need to bring in?" That sort of thing. I was always interested in that.

I basically came in with responsibility for finance and admin. Started working pretty early on, on the human resource side to try and figure out, based on where we thought we were heading, directionally, what kind of organization did we really need to build. Basically working with Gabe on that also, what types of people we need to bring in?

JONES: Yeah. Did you have the sense that Gabe was borrowing a lot from Baxter in the way he wanted to structure things, his idea of how things ought to be put together?

BOHLIN: No. I think Gabe was very open-minded about it. Gabe's a pretty analytical guy. I think he always looks at things very objectively, doesn't let prior experiences, necessarily bias him. He learns from those experiences and takes things away from them, but he was very objective about it and I think it was pretty much kind of an open hand at that stage as to how we did things. It was the kind of thing where we sit down in a group of two, three, four of us and try and figure it out together.

JONES: What were some of the problems that you encountered and some solutions that you brought to bear?

BOHLIN: I don't know that there were major problems. There were more or less, probably growth challenges that any organization has. Again, I kind of commented early on that we were

spread out and doing a lot of things. From a strategic point of view, one of the decisions that we needed to think about was how broadly did we want to continue to partner and collaborate versus holding assets back and developing them on a more proprietary basis.

I think we were one of the early biotech companies that partnered pretty aggressively. We were maybe a little bit more conservative on the financial side than other companies and didn't want to necessarily have to rely on going out for major rounds of equity to finance a growing or expanding business. We wanted to balance and be bringing in money from partnerships, which meant giving up some of the value of the assets that you're working on.

There was always that question of how much of that do we do? I think we felt that we needed to be working in multiple areas on multiple programs, because I think we recognized the inherent risks of drug development. We believed that we needed to spread things around, and the way we felt most comfortable doing that was a more aggressive partnering with a more aggressive partnering strategy than others were taking at the time. I know we were criticized for that on a number of corners. I think in the end it probably served us pretty well.

JONES: And when you say spread things around, at some point you focused, I'm assuming, on different drug development projects. How long did you carry on with the other things, like agriculture and I don't know what else, enzymes?

BOHLIN: Yeah. I'd be guessing on that, but I would say maybe we were still working in those areas my first three or four years. Probably up through '86, '87. Also we were working in the diagnostics area on top of therapeutic drugs. I think we were in four different general areas at that point in time and, as I say, I think most of that we had drilled down and got most of that back into just therapeutic drug discovery and development probably three to four years down from when I joined.

JONES: Were there any of these projects that you sort of reserved just for GI? Was Factor VIII, was Baxter the partner for that or—

BOHLIN: Yeah. That was actually an early partner program and that partnership was in place when I joined in late '83. So the hemophilia area of Factor VIII was already partnered. There was a partnership in the diagnostics area with Allied [Health Group] at the time. <**T: 15 min>** I think those were the two that were in place when I joined. Then we did obviously more partnering after that. And what we tried to do on the partnering side also was to do geographic deals as opposed to global. There were a couple situations where we had arrangements that strictly covered Japan and a couple other arrangements that strictly covered Europe. We were looking to retain ownership, but not necessarily for the full product. Some geographic ownership.

JONES: Yeah. And you did give up some rights and potential revenues down the line, but did that put you in a position where you maybe didn't have some of the financing crises that a lot of other biotech companies went through?

BOHLIN: We might have had less. We had a major financing crisis when we lost the EPO [erythropoietin] suit.

JONES: Yeah. That was later, right? Yeah, that's—yeah.

BOHLIN: That was later. Because we were humming along with four or five very aggressive programs building out infrastructure in the company. We had counted on doing some additional equity financing and that had a pretty significant blow. I'm sure Gabe took you through this, but we really had a fundamental decision to make of either trying to find a source of significant new equity capital or really reducing the size of the company, and putting some programs on hold. And in the end, after some machinations we wound up doing the deal with American Home Products, which provided three hundred million [dollars] of fresh capital and enabled us to keep marching on, basically on the same beat we were before the EPO decision.

JONES: And I'd like to hear more about that. Were you involved in—deeply involved in negotiating that?

BOHLIN: Yeah. It was basically Gabe and I and the outside attorneys and Fred [Frederick] Frank.²

JONES: Well. Maybe we can just talk about it right now. Could you describe that process? You're looking. [...] You're saying, "Okay. Perhaps we need to do this." You start to investigate it and I imagine at some point there was you realize, "Okay, yeah, we can do this. This is the way to go." How did you get to that point?

BOHLIN: I believe we wound up putting some feelers out. I think it was via Lehman Brothers in the pharma industry that we were interested in potentially a strategic relationship or collaboration. Not necessarily a full sale or acquisition, but trying to create an arrangement where a pharma company would come in and put a reasonably sizeable investment into GI.

² Frederick Frank interview by Mark Jones on 25 May and 14 September 2011 and 16 August 2013 at Peter J. Solomon Company, New York, New York and via telephone (Philadelphia: Chemical Heritage Foundation, oral history transcript #1005, in process).

Obviously take some rights with that, but enable us to continue to build value. We had some discussions with, I'm going to guess two or three companies that didn't really get too far.

Then Gabe might remember this better than I do, but American Home Products I think came in independent of that process that we had initiated, because Gabe had a relationship or knew Fred Hassan at the time and AHP approached us, and after they approached us I think we then definitely arranged to have Lehman represent us in our transaction going forward.

JONES: But you had been working with Fred on other talks with other companies?

BOHLIN: I can't remember. It was either Goldman or Lehman that was working for us on that, and I don't remember which one off the top of my head. Gabe might, if you ask him again.

JONES: Yeah. But Fred had put together the Genentech-[F. Hoffman La] Roche [AG] deal and I assume he was trying to do something similar here. I mean and it is I'm sure your interest, right, to maintain autonomy for Genetics Institute to the extent that was possible, right?

BOHLIN: Absolutely. I think when AHP started expressing interest in GI we sat down **<T: 20** min> with Fred and I think we agreed, the board agreed that something modeled along the lines of Genentech-Roche is something that looked attractive because it got, as I said before, a very significant chunk of new equity into the company, to enable us to continue driving forward. We obviously gave up a piece of the company, but the piece of the company we gave up came at a premium to the market at that point in time, a decent premium to the market.

Then we had the opportunity to basically as shareholders ourselves and for external shareholders to say, "Hey we're confident we can continue to build value here, and you can realize that either via AHP taking us out at some point during the ensuing five year period at attractive prices or us building the value independently in the market, and if they decide not to exercise you'll get your return that way."

JONES: Yeah. Did you have an expectation of what would probably happen or did talking to AHP, did they give any sign or did you have a preference?

BOHLIN: I think we kind of rode both sides of that. On the one hand the returns off of the escalating fixed takeout prices was attractive. On the other hand, you get into a young entrepreneurial organization. You accomplish some things and you like to think that you can do better. I think we were fairly indifferent as we went through that five year period.

In response to your first question, I think that, intuitively we probably felt that they were going to exercise at one point in time, but there was no—there was really no basis for that in terms of necessarily signals or discussions other than a gut feel.

JONES: Right We're doing this backwards, but let's talk about the IPO, okay, go back.

BOHLIN: Yep.

JONES: This is 1986.

BOHLIN: Correct.

JONES: And it was a successful offering. I think. It's the figure is seventy-nine million, something like that.

BOHLIN: Yeah, it was and it was a nice valuation at that point in time also. We had the advantage of we went out later than the early higher profile companies did. Certainly Genentech, Biogen [Inc.] were out very early, but Amgen [Inc.], Chiron [Corporation]. I think Immunex [Corporation] and a couple others, several others were out before us. We had raised a fair amount of money privately and we were kind of determined to not jump the gun on the IPO, but we got to a point where I think it made sense to open up broader options for financing going forward, which came with a successful IPO. We made the decision to go, I think in late, '85 and then got the process cranked up and completed the deal, as you probably saw, in May of—I think it was May of '86, if I remember correctly.

But it was an interesting process. The banks were all over us because we had a reasonably high profile at that point in time. I think that it was exciting times, exciting young times for biotech. We had no problem having people come in and make the pitch. Ultimately, it was a very close call between Goldman [Sachs] and Morgan Stanley, and we decided to go with Morgan based on the positive experience we had with them in a private placement Series C round.

JONES: And were you involved in that or was that before you arrived? That was around 1983, right?

BOHLIN: The private placement took place I think just before I joined, like two or three months before I joined.

JONES: And there was some talk even then about perhaps going public, right?

BOHLIN: There was. I think that the thinking was, and, again, this preceded me, but I believe the thinking was, "We got a pretty nice valuation on that private round. Let's let this business germinate for another couple years, see where we can get it, and then take it out at that point."

JONES: I've got some notes here that you were at—there was an IBA [Lifesciences], I guess, IBA meeting, where you made a presentation about the valuation of biotech stocks, and you made some predications about **<T: 25 min>** where this is going to go. Some firms are going to fail. Others will be acquired and a very small number will become independent standalone companies and certainly all that's happened. But it did this is in 1986. Did that proceed the way expected?

BOHLIN: Yeah, I think so. I took a fairly conservative approach to trying to look out and see where the industry was going. It's kind of my nature to look at things from more of a conservative perspective. I also thought that there was just, a lot of happy talk and hype going on at that point in time, which I didn't really particularly care for. So probably my statements, if I think I remember the meeting you're talking about. My statements were probably a little stronger than what they needed to be, but I think I was just trying to provide a personal, kind of grounding opinion, to everybody that was running around with their, satchels open waiting to collect more, raise more money, more equity, that sort of thing.

JONES: Right. Well, these days maybe the only real independent standalone company is probably Amgen, and of course if you look at the history of this thing it could well have been Genetics Institute instead, rather than Amgen.

BOHLIN: Yeah. I put Biogen also.

JONES: Yeah. Well they—yeah. I'm not sure where they would be without IDEC [plc]. I mean they're big now. If they don't do that deal maybe they get acquired. I don't know.

BOHLIN: Yeah.

JONES: But in any case, Genetics Institute took a big hit from the Amgen thing, which, went on for a number of years, right? Can you say something about how that affected life at the company and decisions that were made and so on?

BOHLIN: Yeah. I think obviously everybody was upset by it, but I always felt the company really kept its focus and kept driving forward. I think people were comfortable in the company that management would find a solution to continue to enable us to build the organization the way we were leading up to that decision. I think within a reasonable period of time, we were able to kind of keep things going. We did raise a little bit of equity in an off-balance sheet financing transaction. I think that top management probably worried a lot more about it than the company in general, because the company in general had a lot of confidence in top management and were content to kind of continue to drive forward on whatever areas they were working in, programs they were working on, functions they were trying to build, whatever.

JONES: And how did you communicate these? You've got this pretty serious thing. I mean did it feel like it was hanging over your head for all this time that, if this goes wrong this could be bad, or were you confident that you would prevail in court? I'm not sure.

BOHLIN: I always felt we thought we had a shot in court, but I think we also recognized that we needed to provide for continuing to grow the business, if we were not to prevail in court. So yeah. You know, if you ask people honestly did we expect to prevail, I think they'd probably say 50/50, but you're not going to—you don't want to work in this industry if you got less than, a 50/50 percent chance on something like that. Any time you're in litigation it's a crap shoot.

JONES: Yeah. And of course all along there, there are efforts being made to stay out of court, but that didn't work. And were you involved in any of those negotiations with the Amgen people?

BOHLIN: I was involved in some of them, but I honestly don't remember a lot about that. I certainly, I kind of came in. I was coming in— I wasn't necessarily on the front lines of those, but I was definitely in some of the meetings.

JONES: <**T:** 30 min> Let me ask you about some of the other partnerships along the way. The partnership with Burroughs [Wellcome Fund] that was WellGen [Inc.]. I'm not sure what that is. This is something that you established in partnership with Burroughs?

BOHLIN: Yeah. I was actually in the middle of all that. So we even with our partnerships arrangements, had I think with one exception, retained manufacturing rights for all the products

we were working on. One of the most challenging aspects of biotech back then was when do you start to build out manufacturing and how much do you build out? You have to start, and make commitments well in advance as to when you're going to have a real product approved by the regulatory authorities.

We had acquired a piece of property up in Andover, [Massachusetts] that had, where we had the capability of expanding off of the existing structure. It was basically a lab and office structure, and we decided we were going to put some manufacturing capacity in up there, but we didn't think it was going to be enough in the end. In parallel with that we had had a partnership with Burroughs Wellcome in the TPA area early on in the company, and I think that partnership was still alive, but it wasn't clear where it was going, and whether we were going to wind up in the TPA business or not. But Burroughs Wellcome also wanted to, for purposes of their product, pipeline, create some biologic manufacturing capacity in the United States. So we started talking to them and conceptually agreed to go in on a joint venture, 50/50 basis, building a commercial scale biologics manufacturing facility. And we wound up selecting a site in Rhode Island, just south of Providence, [Rhode Island] and the joint venture was named Wellgen.

We went ahead and I had direct responsibility for that program, the relationship, the joint venture. We had an independent board, two people from Wellcome, two people from GI, which were Gabe and I, and a lawyer I think wound up forming the fifth member of the board. We wound up, they wound up doing a lot of the engineering. They had actually built out biological manufacturing. They're one of the early ones in Europe, so had experience in the area and that was another thing that was attractive to us, in addition to kind of sharing the capital requirement and ultimately the operating requirement, for the venture, the facility.

They had a lot of experience both in engineering, building, and operating facilities. So we thought we could learn a lot from them and leverage into that. We wound up engineering and building out this very large facility in Rhode Island. I don't remember all the specifics, but about the time that was completed and ready to be commissioned, we had had a number of major productivity improvements in products that we were manufacturing on a pilot scale basis at GI. And we reached a conclusion— I'm simplifying all this, but this is essentially the way that the thinking went. We wound up reaching a conclusion that we could handle everything we needed for the next probably five to seven years out of our Andover facility, and that we really didn't need the WellGen capacity.

We then wound up going into a negotiation with Wellcome and they, I think, conveniently, I think they felt that they were perhaps going to need a little bit more capacity than what was initially envisioned in the WellGen facility. If I remember correctly, we were building out four separate manufacturing suites in WellGen, two large and two smaller ones, and we were going to take one small and one large and they were going to take one small and one large. I think at the time that we reached the conclusion we didn't really need the WellGen capacity, they had an uptick in what they needed. It kind of created a possibility to negotiate our way out of that, which we effectively did. <T: 35 min> I think I remember we completed that just after we did the AHP deal. So that's the story of WellGen.

Then eventually, Wellcome wound up selling that facility to it was either directly to Immunex or the company that Immunex was partnered with. I can't remember if it was Enbrel or something else. I think it was Enbrel. It was the company that AHP ultimately acquired based out in Michigan, and the name is escaping me right now. But eventually Burroughs Wellcome wound up selling the whole facility to them and it became an Immunex-AHP facility, and then ultimately, then it became an Amgen facility after Amgen acquired Immunex.

JONES: There's some interesting issues with manufacturing. Well, one is with Burroughs Wellcome. What biologics products did they have to manufacture at that time? Were these things like vaccines or were they partnering with other people, other biotechs that were producing products?

BOHLIN: I think were a vaccine or two, but I think there was also a therapeutic, and I just don't remember off the top of my head what it was. I think one of the products coming through their pipeline was Campath, which they ultimately never wound up developing. Now it's a Genzyme product now.

JONES: Right, yeah, yeah.

BOHLIN: But that was coming through the pipeline and I think that was one of the products that they were looking at as potentially needing pretty good sized capacity to manufacture.

JONES: And when you say that was your strategy to retain manufacturing rights, was that sort of an easy thing to accomplish. Because if you're partnering with large pharmaceutical companies a lot of times they really don't know how to do it and they're relying on you?

BOHLIN: Yeah. I think that was in large part the case. I mean one of more lucrative partnering arrangements we had was the Factor VIII deal with Baxter. They had no biological manufacturing capability at the time we partnered with them or at the time that we were developing Factor VIII with them. They ultimately build capacity as that product moved toward the marketplace or maybe shortly after it got into the marketplace. But yeah, it was the kind of thing that I think, at that time pharma companies were willing to give up manufacturing rights. It's getting a lot tougher now with all the expertise and capacity that's out there.

JONES: Right let me ask you a bit about, there was a suit, counter suits at Genentech over TPA, and I believe this is after or about the time that Genentech got approval for their product. Were they ahead of GI in developing?

BOHLIN: Yeah. They were definitely ahead of us and honestly I don't remember that much about that litigation because I wasn't really that involved in it.

JONES: Yeah, okay.

BOHLIN: But they were definitely ahead of us.

JONES: Right, okay. There was a partnership with Syntex [Pharmaceuticals]. Were you involved in that?

BOHLIN: No. And that didn't last too long. I'm trying—I can't remember what it was, but that was not a major partnership and certainly not something we ever derived any benefit from in the end.

JONES: I see. Any other important partnerships that we haven't mentioned yet?

BOHLIN: Yeah, the couple that were, again, ultimately wound up creating good value for GI were a partnership on EPO in Japan with Chugai [Pharmaceutical Company Limited] and with Boehringer Mannheim in Europe. We wound up, again, manufacturing product, in both of those instances and collecting royalties. We got a pretty good chunk of the ultimate sales values, as we did with Factor VIII from the partners on that.

JONES: Right. So the EPO, all the development that went into EPO was far from a total loss, right? You didn't have ...

BOHLIN: Oh, absolutely.

JONES: Yeah. So you didn't have the American market, but then maybe, and I think Gabe might have went through this, but what put the company in such a bad spot after? Was <**T: 40** min> this just on Wall Street, the perception on Wall Street that—

BOHLIN: Yeah.

JONES: Yeah.

BOHLIN: I think that's right. I think that people were starting to look at the market potential of EPO and we actually did have a partnership in the US with Upjohn [Company] on EPO, but that product never got to market. Yeah, it was largely Wall Street put a lot of GI's valuation into full proprietary or I should not full proprietary rights, but derivation of revenue from Upjohn in the US. We would have manufactured that product for them, and probably didn't think that Chugai and Bayer [AG] were going to be as successful as they ultimately were in terms of product introduction and market share in Europe and Japan.

JONES: Yeah. And by then you had already made the deal with AHP and is that the case?

BOHLIN: I believe—

JONES: By the time that it became successful, the product.

BOHLIN: Yeah.

JONES: Yeah.

BOHLIN: Yeah.

JONES: What was your feeling then? I think it's 1996 that AHP does decide to exercise its option and purchase the rest of the company. Is that correct, '96?

BOHLIN: That's right.

JONES: Yeah. What was your feeling about that? Did they give you any signals that was coming and how did you feel about it?

BOHLIN: No. We were down to the last quarter in terms of the fixed option five year exercise period and they let us know very early in the quarter about that. At that point in time I think we were not at all certain they were going to exercise. In fact, at that point in time we probably assumed they weren't because we were so deep into the exercise period. So I think it did surprise most, if not all of us at that point.

JONES: And what was the reaction? I guess you had to pass the word on to the troops, right? What was the effect on the company at that point?

BOHLIN: Well, we really couldn't. We had to hold that pretty tight because we were a public company at that point in time and our stock was trading I want to say roughly twenty dollars below what the exercise price was at that point. The market was obviously betting against it big time. So we had to keep that within a very tight, small senior management group at GI, probably five or six people max.

JONES: Yeah. Was that difficult to manage?

BOHLIN: No. Things had to happen pretty quickly. I think we wound up at that point—Gabe probably told you, hiring [Robert F.] Greenhill. Bob Greenhill had just formed his own boutique out of Morgan Stanley for investment advisory services. So we hired Greenhill to advise us on it and we had, obviously very good lawyers from Hale and Dorr. Things moved relatively quickly. There was in spite of the fact it was a fixed price takeout, there was a fair amount of negotiation that had to take place in terms of how the company was going to operate going forward all that sort of thing. But it it got done I think in a very businesslike and fairly efficient manner.

I think that there was at that point people in the company were pretty bullish on where we were heading because a lot of our programs were going extremely well. And that the top management group there were some people in the top management group that didn't want this to happen, and I was one of the ones that argued pretty strenuously that we should take this. It was a pretty phenomenal valuation at that point in time. Looking at the risks of drug development and commercialization I just felt that, it was for me it was kind of a no-brainer from a shareholder perspective.

JONES: Right. What did it mean to you personally when you're looking ahead? I mean did you have a sense of were you going to stay and or stay through the transition period or what was your feeling?

BOHLIN: I had a lot of feeling for GI <**T: 45 min>** at that point in time. I really liked the people in the company. I had roughly half of the sixteen hundred people reporting to me. Definitely felt that I would stay for some reasonable transition period, but had my doubts as to whether I would stay after that because I had a lot of experience working with AHP during five year option period and it's a pretty controlling organization. I just didn't feel like that would have been the best fit for me going forward. I had been with GI for thirteen, fourteen years at that point and had a little bit of a desire, once this decision was made, I started thinking that I

probably should do something a little different going forward. I definitely felt that I could be very helpful in the transition and was definitely committed to that.

JONES: Right. And well, how long did you stay before you went on to Syntonix [Pharmaceuticals, Inc.]?

BOHLIN: It was a year.

JONES: —one year.

BOHLIN: Twelve months, yeah. That was an interesting process because I worked very hard in that transition period on together with our head of HR [human resources], to try and retain as much of what we felt was contributing to a very good culture at GI as possible going forward, but it was very inconsistent in a lot of ways with the way AHP operating. We spent a fair amount of time with the HR and the finance groups and you have to realize that at AHP the finance group was a very powerful group, at that stage. We spent a lot of time negotiating little things with them. Being able to retain the name and the logo and some of the benefits that were very different from what AHP had going forward.

We were making excellent progress on that and had agreements on a number of areas that—and I thought it was really going in the right direction as far out as ten to eleven months from the acquisition. The general thought was that GI was going to be run as an autonomous unit reporting in to AHP going forward, and that certainly made retaining some of the things we were looking to retain much easier. What happened, it was either in month ten or eleven, they reached a corporate decision that they wanted to integrate GI into the Wyeth pharmaceutical division, fully integrate us in and have us report in there. So for me it was like ten months of negotiation kind of down the drain. We didn't lose everything, but we lost a lot of, what I thought were some fairly important, autonomy types of things from that decision that integrate us into the pharmaceutical position.

JONES: And that was sort of a last straw for you or were you already preparing?

BOHLIN: Yeah. Well I was planning on leaving at the end of twelve months anyway. But it was sad in a way because we'd worked very hard, for those first ten months trying to negotiate as much autonomy as possible. We thought we had made a lot of progress and then all of a sudden this kind of eleventh hour decision came along.

JONES: And then you start Syntonix. You're a founder and—

BOHLIN: Well here was my thinking coming out of GI. I had planned—I left in it probably would have been, May or June of '96 or '97. I can't remember, whatever twelve months from the deal was. I decided I was going to take six months off, sit back and think very broadly about what I want to do going forward. I was completely open-minded about it. I wasn't necessarily certain I was going to stay in biotechnology. In fact I even though about possibly doing something in a not-for-profit area, but I was kind of committed to really maintaining an open mind, taking my time and kind of thinking it through.

What happened, I was probably out of GI for less than a month and Gabe had connected with a couple of the scientific people that were trying to put Syntonix together at that point in time, and he said, "You ought to really talk to these guys. Why don't you just consult <T: 50 min> with them?" He said, "I'd be willing to get involved if this thing gets off the ground. But why don't you just talk to them and consult with them and see if it looks like it's anything you're interested in doing?"

I said, "Fine." I connected with them. I spent two or three months kind of trying to figure out where I was going to go. It's one of the things where you kind of get started on something and the adrenalin kicks in and I said, "Gee, this looks pretty interesting. I think that I'd like to start this company up with these guys as CEO."

It fell into place very quickly. It was totally unintended in terms of where I thought I was heading directionally. I think we got Syntonix up and going. It had already been incorporated on paper, but we started it up operationally late, I think it was late '97 or '98. I can't remember off the top of my head.

JONES: Right. And after thirteen or fourteen years in the biotech industry you felt like CEO [chief executive officer], this is you. How to do it and you can make it work.

BOHLIN: Yeah. I thought I had a reasonable shot. I mean, I understood the CEO is completely different than any other role you can be in at a company and any company, particularly in life sciences, and that it was going to be clearly a learning experience, but I thought I felt I had the capability to get this company off the ground and at least take it to a certain, and then kind of figure out what happens from there. I liked the scientific founders a lot. That kind of got Syntonix up and going.

JONES: Yeah. Who were the scientific founders?

BOHLIN: They were two brothers, Laurence Blumberg, who actually was a really high flying buy-side analyst for Alliance in New York, and knew a lot about he was an MD by training.

Understood the industry really well, understood how investors looked at the industry. And his brother, Rick [Richard] Blumberg was head of gastroenterology at Brigham and Women's in Boston. So Rick had a couple others. There were a couple other scientific founders that Rick had kind of pulled together in the Boston area, but Rick was kind of the principal scientific leader and his brother, Lar, was kind of a combination in the science/business side.

JONES: Good Well, listen, why don't we leave it there? And then when we get on to volume two, well, we'll call you back and ask about Syntonix and Sirtris [Pharmaceuticals, Inc.] and Constellation [Pharmaceuticals, Inc.]. How does that sound?

BOHLIN: I think I'd be content to leave it at Volume one right now.

JONES: Yeah, okay. Well—

BOHLIN: If anything else comes up as you're going through all this process feel free to get back in touch. I'd be happy to spend some more time if you have some other things that you think about after we've hung up.

JONES: Okay, great. Thank you, Garren. We appreciate your help.

BOHLIN: Okay. A pleasure to talk to you.

JONES: Bye-bye.

BOHLIN: Take care. Bye.

[END OF AUDIO, FILE 1.1]

[END OF INTEVIEW]