SCIENCE HISTORY INSTITUTE

THOMAS WIGGANS

Transcript of an Interview Conducted by

Mark Jones

At Menlo Park, California

on

27 April 2015

(With Subsequent Corrections and Additions)



Courtesy of Thomas Wiggans

Thomas Wiggans

SCIENCE HISTORY INSTITUTE Center for Oral History FINAL RELEASE FORM

This document contains my understanding and agreement with the Science History Institute with respect to my participation in the audio- and/or video-recorded interview conducted by <u>Mark Jones</u> on <u>27 April</u> 2015. I have read the transcript supplied by the Science History Institute.

- 1. The recordings, transcripts, photographs, research materials, and memorabilia (collectively called the "Work") will be maintained by the Science History Institute and made available in accordance with general policies for research and other scholarly purposes.
- 2. I hereby grant, assign, and transfer to the Science History Institute all right, title, and interest in the Work, including the literary rights and the copyright, except that I shall retain the right to copy, use, and publish the Work in part or in full until my death.
- 3. The manuscript may be read and the recording(s) heard/viewed by scholars approved by the Science History Institute unless restrictions are placed on the transcript as listed below.

This constitutes my entire and complete understanding.	Signed release form	
	is on file at the	
(Signature)	Science History	
(orginataro) -	Thomas Wiggans	
(Date)	January 27, 2020	
OPTIONAL: I wish to place the following restrictions on the use of this interview:		

I understand that regardless of any restrictions that may be placed on the transcript of the interview, the Science History Institute retains the rights to all materials generated about my oral history interview and will make the title page, abstract, table of contents, chronology, index, et cetera (collectively called the "Front Matter and Index") available on the Science History Institute's website. Should the Science History Institute wish to post to the Internet the content of the oral history interview, that is, direct quotations, audio clips, video clips, or other material from the oral history recordings or the transcription of the recordings, the Science History Institute will be bound by the restrictions for use placed on the Work as detailed above. Should the Science History Institute wish to post to the Internet the oral history interview during my lifetime, I will have the opportunity to permit or deny this posting.

I understand that the Science History Institute will enforce my wishes until the time of my death, when any restrictions will be removed.

This oral history is designated Free Access.

Please note: This oral history is protected by U.S. copyright law and shall not be reproduced or disseminated in any way without the express permission of the Science History Institute. Users citing this interview for purposes of publication are obliged under the terms of the Center for Oral History, Science History Institute, to credit the Science History Institute using the format below:

Thomas Wiggans, interview by Mark Jones at Menolo Park, 27 April 2015, (Philadelphia: Science History Institute, Oral History Transcript # 1051).



 $Chemistry \cdot Engineering \cdot Life \ Sciences$

The Science History Institute collects and shares the stories of innovators and of discoveries that shape our lives. We preserve and interpret the history of chemistry, chemical engineering, and the life sciences. Headquartered in Philadelphia, with offices in California and Europe, the Institute houses an archive and a library for historians and researchers, a fellowship program for visiting scholars from around the globe, a community of researchers who examine historical and contemporary issues, and an acclaimed museum that is free and open to the public. For more information visit sciencehistory.org.

THOMAS WIGGANS

Education

1975	BSPS, University of Kansas
1976	MBA, Southern Methodist University

Professional Experience

	Skillern's Drug Store
1975-1976	Pharmacist
	Eli Lilly & Company
1976-1978	Sales Representative
1978-1980	Marketing Associate
	Serono Laboratories Inc.
1980-1983	Director of Marketing
1983-1985	Vice President, Sales and Marketing
1985-1986	Executive Vice President
1986-1991	President and General Manager
	Serono Laboratories Ltd.
1991-1992	Managing Director
	Cytotherapeutics
1992-1994	Chief Operating Officer and Director
	Connetics Corporation
1994-2005	Chief Executive Officer and Director
2005-2006	Chief Executive Officer and Chairman
	Peplin, Inc.
2007-2009	Chairman of the Board and Chief Executive Officer
	Dermira, Inc.
2010-2020	Co-founder, Chairman, and Chief Executive Officer
2010-2020	Co-founder, Chairman, and Chief Executive Officer

ABSTRACT

Thomas Wiggans grew up in Fredonia, Kansas, a small town with just a few thousand residents. Both his grandfather and father ran a local drugstore, which Wiggans worked in during his adolescence. This led to Wiggans not only having an early interest in becoming a pharmacist but allowed him to learn the ins-and-outs of the profession. He attended the University of Kansas for pharmacy, where he worked summer jobs to support himself. While studying, he was approached by the pharmaceutical company Eli Lilly for a sales position. Wiggans expressed his interest in first pursuing a master's in business administration; after receiving his MBA from Southern Methodist University, he was hired at Eli Lilly for an entry-level marketing position. He was placed in Jacksonville, Florida, where he was a member of a small marketing team with just two other representatives. He was given a multi-month project based out of Indianapolis, Indiana, after which he was promoted to a marketing associate.

Uninterested in continuing at Eli Lilly, Wiggans began entertaining other job opportunities. He interviewed with Serono in Boston, Massachusetts, which focused on fertility technology. The company was new to the United States and Wiggans was hired as the marketing manager to grow the company's American presence. Wiggans established the company's sales force at a pivotal time, when fertility technology was booming. The success of the sales force led to Wiggans being promoted to general manager. As the general manager, Wiggans worked with Integrated Genetics to develop recombinant gonadotropins and Celltech Group from recombinant growth hormones. After facing budgeting issues, Wiggans was sent to the United Kingdom, where he worked until he left Serono in 1990.

After leaving Serono, Wiggans was approached by CytoTherapuetics, a cell transplantation company, to join their company. Wiggans accepted the position and returned to Boston, commuting each day to Providence, Rhode Island. He was interested in bringing commercial products to the company, but the board disagreed. This coupled with the difficulty of performing clinical trials pushed Wiggans to seek out other companies. He later received a call from a recruiter with the company Connetics. While accepting the position would mean moving his family across the country to California, he accepted. Connetics' main product was Relaxin, which was a genetically engineered hormone that they were looking to use to treat scleroderma. While Connetics never developed Relaxin as a treatment for scleroderma, they did shift their focus towards foam dermatology products, which Wiggans recognized as an underserved market. Before the company was sold in 2006, Wiggans helped grow Connetics to four hundred employees and two hundred million dollars in revenue.

Not ready to retire, Wiggans began looking for his next venture. He was invited to join the board of Peplin Operation Pty Ltd., where he was the chairman and then CEO for one year. He also pursued a political career in his home state of Kansas, inspired by his years working to lobby for biotechnology in Washington D.C. After an unsuccessful campaign for governor, Wiggans returned to California, where he was invited by Bay City Capital to look for new opportunities. There, he works as an operational company manager with Gene Bauer, focusing on serving dermatologists. Wiggans has also worked with the Biotechnology Institute and the BioGENEius program, the former of which he helped to make a national program.

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 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 typescript. Please contact us if you would like additional information about these materials. We have established guidelines to help us maintain fidelity to the language and meaning of each recorded interview while making minor editorial adjustments for clarity and readability. Wherever possible, we supply the full names of people, organizations, or geographical locations mentioned during the interview. We add footnotes to the transcript to provide full citations for any publications that are discussed, to point to extant oral history interviews, and to clear up misstatements or provide context for ambiguous references in the transcript. We use brackets to indicate the addition of material that was not in the audio, and bracketed ellipses to indicate the deletion of recorded material. The transcript also includes time stamps at one-minute intervals. We omit without noting most instances of verbal crutches and all instances of nonlexical utterances. We also make small grammatical corrections where necessary to communicate interview participants' meaning. Finally, staff of the Center create the abstract, chronology, and table of contents. With the 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.

TABLE OF CONTENTS

Chronology
Abstract
Interviewer Bio
About this Transcript
<u>27 April 2015</u>
Farly Life and Education

Error! Bookmark not defined. Error! Bookmark not defined. iii iii Error! Bookmark not defined.

Early Life and Education

Grew up in Fredonia, Kansas. Father and grandfather ran drugstore. Adolescence in fifties and sixties. Worked in drugstore doing chores. Early interest in becoming pharmacist. Average performance in grade school. Expectations of going to college. Attended University of Kansas. Working through summers to support self. Interviewed by Eli Lilly in pharmacy school. Decided first to pursue MBA. Father's feeling about pharmacy career. Kansas pharmacy school focused on retail and research. Encouragement from Dean Hugh Cotton to pursue industry. Attended Southern Methodist University for MBA.

Eli Lilly and Serono

Hired at Eli Lilly for sales. Worked entry level marketing position. Placed in Jacksonville, Florida. Training to learn about products and sales process. Sold around Jacksonville with two other representatives. Given multi-month project in Indianapolis, Indiana. First date of project was on day of Chakrabarty argument. Became marketing associate upon to return to Jacksonville. Uninterested in next career step of sales manager. New position at Serono in Boston, Massachusetts. Interest in moving to Boston and leading new marketing department. Serono's work with infertility. Only marketing manager at Serono. Working with Fabio Bertarelli. More personal and casual environment than Eli Lilly. Starting sales force during advancement of fertility technology. Customer base of OB/GYNs and endocrinologists. Smaller company allowed for more attention to customer needs. Promotion to general manager. Work with Integrated Genetics and Celltech Group and gonadotropins and recombinant growth hormone. Research for options and potential partners. Difficulties working with Bertarelli. Budgeting issues. Move to United Kingdom. Involvement with Biotechnology Innovation Organization, Industrial Biotechnology Association, and Association of Biotechnology Companies. Sale of diagnostics in United Kingdom. Leaving Soreno.

CytoTherapeutics and Connetics

Approached for position at CytoTherapeutics. Interest in starting over and small company. Harvested and purified cells implanted for Parkinson's and diabetes. Move back to Boston and commute to Providence, Rhode Island. Wanted to bring in commercial products. Faces pushback from board. Difficulty bringing treatment to clinical trials. Received call from Connetics recruiter. Genetically engineered hormone, Relaxin, to treat scleroderma. Move to California with family. Failutre of gamma interferon and Relaxin. Switch to foam products for dermatology. Work with Gene Bauer. Building up Connectics to four hundred employees and two hundred million dollars in revenue. Company sold in 2006.

Later Career

Did not want to retire. Met wife at Soreno. Wife received nursing degree and MBA. Invited to join board at Peplin Operation Pty Ltd. Was chairman of board and then CEO for one year. Bought by LEO Pharma. Interest in moving back to Kansas for political career. Career lobbying for biotechnology in Washington D.C. Aspired for offices like Governor or Senate. Ran as democrat. Dislike of political fundraising. Return to California. Invited to Bay City Capital to look for opportunities. Work with Gene Bauer. Focus on serving dermatology. Developing two acne product and one anti-inflammatory product. Working as operational company manager. Discussion of luck in career moves. Involvement with Biotechonology Institute and BioGENEius program.

Publication List

INTERVIEWEE:	Thomas Wiggans
INTERVIEWER:	Mark Jones
LOCATION:	Menlo Park, California
DATE:	27 April 2015

JONES: [...] Okay. Well, let's start at the beginning, okay? This is a biography.

WIGGANS: Okay.

JONES: So tell me a bit about—where are you from? I mean, I know where you're from but tell me about it.

WIGGANS: I grew up in a very small town in Kansas, so . . .

JONES: Fredonia.

WIGGANS: Fredonia. Quintessential small, Kansas town. Probably four thousand, three thousand people there. Probably less now.

JONES: Very rural community. A farming community?

WIGGANS: [Yes].

JONES: Were your family farmers?

WIGGANS: My father and grandfather ran the drug store in town.

JONES: And schooling was probably—how many students in your class?

WIGGANS: Ninety-eight in my graduating class.

JONES: Oh, well that's actually pretty good size.

WIGGANS: Not bad.

JONES: So, you got people coming from all over the county.

WIGGANS: Yes, that's right. But again, I think it's much smaller now. Small Kansas towns don't thrive like they used to. So I think it's probably forty or fifty in the graduating class now.

JONES: Well, you were growing up in the fifties and sixties. What was that environment like?

WIGGANS: Just what you'd think: rode your bike everywhere, kept your door unlocked. If you went to the next town thirty miles away that was a big deal. [laughter]

JONES: What was the nearest big town?

WIGGANS: Well, it was an hour and a half to drive to Wichita [Kansas], two and a half hours to drive to Kansas City [Kansas]. One of my daughters described it best when they were there, and I'd taken them back to see their grandmother, and we got up really early one morning to drive to Kansas City to catch a flight. So, they got in the car and fell asleep and about an hour or two later one of them wakes up and looks out the window and goes, "Well, I thought we'd be somewhere by now." [laughter]

JONES: Now did you work in the drugstore?

WIGGANS: I did, I did. Swept, took out the trash, and kind of progressively got more responsible jobs, like restocking shelves. And then I actually worked—after I got my pharmacy license—worked there for a month or two between college and graduate school.

JONES: As a pharmacist.

WIGGANS: As a pharmacist, [yes].

JONES: And growing up, did you learn the business? Did you get involved in that, bookkeeping and . . . ?

WIGGANS: Well, I remember closing the store, you know, when they locked the doors and closed for the day. You know, back then you counted the money in the cash register. That was the day, right?

JONES: [Yes].

WIGGANS: No credit cards, no nothing. A lot of credit for the farmers. So, you know, the farmers could charge until the crops thing happened. But it was a cash business.

JONES: And growing up and going to school, did you have an idea about—when did you want to become a pharmacist? When did that idea come to you?

WIGGANS: Well, I remember two things. At one time when I was a little kid we went to Kansas City and my parents took us to the airport and I remember thinking—and I saw these guys coming in with their briefcases and getting on planes—and I remember thinking, "That is what I want to do. I want to go someplace and do something."

And then when I was in college I woke up one day and said, "I don't really know what I want to do so I'll just get a pharmacy degree, I'll always have a job, and then I can figure out what I want to do."

JONES: And you knew something about it, right? You had pharmacists that worked at the drugstore?

WIGGANS: No, just my dad and granddad were the only two, so that was it.

JONES: They were pharmacists?

WIGGANS: [Yes].

JONES: [Yes]. Okay, so they were filling prescriptions—

WIGGANS: They ran the store, they owned the store.

JONES: So did they—and watching that you know, they're filling—

WIGGANS: Well, it must—you know, it generated some interest. **<T: 5 min>** I didn't wake up one morning and say, "Geez, you know, maybe I should be an accountant and I could always get an accounting job," so I did want to go to pharmacy school. Thank goodness it was a lot easier to get into when I got in than it is now.

JONES: And in school, were you a good student? Did you take to it or ...?

WIGGANS: I would say I was an average student. I was an average student [...] No scholastic achievements for me. But I got good enough grades to get into college, got good enough grades in college to get into pharmacy school, got good enough grades to get into grad school. Probably would be a little stretch now. [laughter]

JONES: But your dad was a professional. Was there an expectation that you would go to college or . . . ?

WIGGANS: [Yes]. There was an expectation that I was going to go to college. And I didn't exactly score high marks on planning, either. I remember one time when I was a senior in high school, one night at dinner my dad said, "You're going to college, right?" I said, "[Yes]." And he said, "Any idea how you're going to pay for it?" And I said, "Nope." So he said, "I'll pay your undergraduate tuition and after that you're on your own." So that was it.

JONES: And you went to Kansas, University of Kansas. Which I suppose is the big goal for everybody in the state.

WIGGANS: [Yes], it was a big goal. I guess my grades were good enough I could've looked at other places but [...] admittedly my horizons might've been a little more narrow then than they should've been, so that was it. That was the only place I wanted to go.

JONES: That's a good place to be, right?

WIGGANS: [Yes]. I think the first semester's tuition check was \$174. So ...

JONES: But that was a lot more money in those days.

WIGGANS: It was, it was, but still, you know, now tuition checks are considerably higher than that even in public universities.

JONES: [Yes]. So did you work your way through, did you hold jobs?

WIGGANS: [Yes], a series of jobs. I mean, I worked every summer. Every summer I made enough money to basically get through the next year.

JONES: What kind of jobs?

WIGGANS: I ran a swimming pool in Fredonia for two summers, and then the best job in town for a kid was working at the cement plant. There was a concrete quarry and you dug out the rock and you made concrete and—

JONES: It was best because of the money you could make?

WIGGANS: The money. You know, I think it was like—I don't know, probably four or five dollars an hour, which was spectacular back then. So I did that for two years and—

JONES: That must've been hard work.

WIGGANS: We actually built the railroad track for the train that went around the quarry to haul the rocks in, so it was hard work. It was great pay, great exercise.

JONES: [...] So you did settle on pharmacy and then—what was the plan then? I mean, you went back for a couple of months . . .

WIGGANS: When I was in pharmacy school, Eli Lilly came to interview, because back then Eli Lilly only hired pharmacists, and I interviewed with them and they asked me what I wanted to do and I said, "You know, I'm thinking about getting my MBA," and they said, "You do that. You go get your MBA then you call us." So I went and got my MBA, then I called them, and they hired me.

JONES: There was a famous guy at Lilly from Kansas, Irving Johnson. Did you—

WIGGANS: [Yes]. He was either the number one or number two guy at Lilly when I was there.

JONES: In research, yeah?

WIGGANS: Yes.

JONES: He just passed away recently.

WIGGANS: Did he?

JONES: But you probably had no idea who he was then.

WIGGANS: Well, you know, the thing is when I was at Lilly, when I went into the home office in the late seventies, it was a much smaller organization. I was an associate. You know, I was entry level grunt in marketing, and I made a couple presentations to Gene [Eugene L.] Step, the president of the corporation. Just—incredible. You knew the executives. I knew Irv Johnson. [I] didn't have much interaction with him but would occasionally be in a meeting with him. I mean, it probably would never happen that way now.

JONES: [Yes].

WIGGANS: I don't think I was ever in a meeting with Dick [Richard D.] Wood, who was the chairman, but a lot of meetings with Gene Step.

JONES: Well, they said, "Get an MBA first," and you wanted to go into the pharmaceutical business.

WIGGANS: I did. The one guy who was very influential **<T: 10 min>** on me was the associate dean at the pharmacy school, Hugh Cotton, who I don't think he ever worked in industry. But, you know, if you were in pharmacy school at Kansas there were two paths: retail pharmacy for, like, 90 percent of the graduates and a pretty good research program for 10 percent. So, there was a pretty good research track. Tak [Takeru] Higuchi, who was one of the great pharmaceutical chemist leaders, was at Kansas.

Alex [Alejandro] Zaffaroni actually founded ALZA at Kansas, then had the good sense to move it out here but there's a lot of good pharmaceutical chemistry originating in Kansas. So if you were there, mostly retail, occasional research, but Dean Cotton, you know, he tried to expose people to consider other things. So, he's the one that first started saying, "Hey, you know, you should think about going into industry." That's what appealed to me.

JONES: [Yes]. But you're making kind of a shift from actually doing pharmacy to the business side.

WIGGANS: Right.

JONES: And did that come from you? Was that your idea?

WIGGANS: That was my idea. You know, and I'm sure it was disappointing to my dad that I didn't come back, but that wasn't too bad.

JONES: Back to Fredonia to work in the store and be the pharmacist?

WIGGANS: [Yes].

JONES: [Yes]. But I'm sure he was pleased that you were doing well.

WIGGANS: He obviously was very, very excited and proud that I went to Lilly because, you know, that was a really great company—still is. And then, early on when I left Lilly to go to Serono [Laboratories], which was a startup at the time he was very supportive, of course, but I

think he was going, "Wow, I'm not sure I get this move. You're leaving Lilly to go to this little company I've really never heard of."

JONES: [Yes], we'll get to that.

WIGGANS: [Yes]. [laughter]

JONES: So MBA from SMU [Southern Methodist University], that's interesting. How did you land there?

WIGGANS: They had a one-year program. [laughter]

JONES: Is that it?

WIGGANS: They had a one-year program and there was a guy I knew from Fredonia who had gone there to get his MBA and worked out good so . . . You know, I would probably still advise somebody do what everybody does; get your undergraduate degree, go work, then go get your MBA. It probably is more impactful, but I didn't.

JONES: It would probably be better because you could get more out of the MBA?

WIGGANS: I think so, yeah, I think so. After you've worked and kind of seen the real world it's probably better. I had worked in drugstores. I [...] worked, obviously, for my dad. I did an internship one summer at Marion Laboratories—

JONES: Which is Kansas City.

WIGGANS: Which was in Kansas City before whatever it is now, eight mergers later or whatever. But I wanted to get the MBA, I wanted to go into industry, but I wanted to do it quickly.

JONES: [Yes]. And so during the interview, Lilly comes and you're talking to them and they say, "[Yes], we like you. You know, come . . . " But they—

WIGGANS: I think they—probably I could've gotten the job then, I think. I mean, they seemed pretty anxious to hire me but, you know, they said, "Hey, you want to go get your MBA, then you might want to come work for us. Well, call us later when you got your MBA."

JONES: Okay. So you did that and then you called them?

WIGGANS: I called them, yes. I called them and said, "I'm getting ready to graduate," and, God, I don't even remember if they interviewed me again. They said, "Where do you want your sales territory?" So I—

JONES: Had you talked sales to them before?

WIGGANS: [Yes]. That's what—I guess, you could've gone into research, maybe, but they hired pharmacists to go into sales. That was the entry-level marketing position.

[...] While I was at SMU I worked for Skillern's Drug Stores, which was a chain in Dallas. I worked every weekend, every holiday, and confirmed I didn't want to do that for the rest of my career, so I called them and said, "I'm getting ready to graduate," and I don't even remember them interviewing me again. They might've, but they said, "Where do you want your sales territory to be?" and I gave them basically every Southern state from California to Georgia, except for Florida, and they sent me to Jacksonville, Florida, which was fine. [laughter]

JONES: And you wanted to be in the South because of the weather?

WIGGANS: [Yes]. [laughter] <T: 15 min>

JONES: And why did you exclude Florida?

WIGGANS: Oversight. It never crossed my mind.

JONES: All right. So, it's a new thing. You're doing sales for Eli Lilly. What do you have to learn? What's the job entail?

WIGGANS: Well, you know, they sent me down to meet with the guy who would be my boss, the district manager. The district office was in Atlanta. So, I met with him, then I went into initial training for whatever it is, two weeks or maybe it's a month at Lilly. So, you went in and you did initial training and you—

JONES: To learn about the products and ...

WIGGANS: About the products and about the sales process and about Lilly policies and procedures. You know, "Don't ever put your detail bag on a doctor's desk, you might scratch it,"— you know, so things like that.

JONES: [Yes]. And did you feel prepared for this? I mean, did you feel like you knew what you were doing or . . . ?

WIGGANS: [Yes]. I was kid, you know? I was very excited. Really—I was so excited for the job, just to be working for Lilly.

JONES: [Yes]. Fair amount of travelling, right? Were you driving around?

WIGGANS: No. No, I mean Jacksonville was a pretty big town. There were three Lilly reps in Jacksonville.

JONES: Really?

WIGGANS: [Yes], so I was one of three. The other guys were older guys and mentored me very well, so that was good.

JONES: [Yes]. What did you have to learn? What were the tricks of the trade that you picked up?

WIGGANS: Well, I really think I learned pretty early on—I guess, there's no reason to edit this out—all you had to do was work hard. I mean, you just had to make the calls, because it was a pretty easy job for those old guys, right? If you were with Lilly and you'd been in the territory for fifteen or twenty years you got the business. They knew their doctors—

JONES: Good products.

WIGGANS: [Yes], good products.

JONES: They need the products.

WIGGANS: Absolutely. Antibiotics and, you know, just really, really good stuff. But if you worked a little harder, I found you got a little more business, so that's what I learned first, you know? Just go to work and make the calls.

JONES: [Yes]. So, you're doing well at that and how—

WIGGANS: [Yes], I think so. I guess so. I mean, Lilly had a program at the time to bring guys in from the field to do a temporary assignment and then they'd decide whether you would come in to a marketing job. So, after eighteen months in the field I got called in on a—they called it a switch assignment. So, I came in, did my switch assignment—

JONES: When you say, "came in," that means going to Indianapolis?

WIGGANS: [Yes], went to Indianapolis. So, I flew into Indy on a Sunday afternoon from Jacksonville, in 1978, I think [. . .]. It was the first day the airport was open after a massive snowstorm, so I flew from Jacksonville. I remember coming in. It must've been twenty below zero. You could barely get around.

JONES: Well, you were used to that weather in Kansas, though.

WIGGANS: [Yes], kind of. [laughter] I think that was probably a two- or three-month assignment and then if you didn't screw up then they would invite you back in to be a marketing associate, kind of take the next step on the career path.

JONES: [Yes]. And it's something you wanted to do?

WIGGANS: [Yes], absolutely. I mean, it was fun being in sales. [But] I wanted my career to go up, not stay flat.

JONES: [Yes]. Right. And so that's learning another kind of game—different game, marketing.

WIGGANS: Absolutely. [Yes], absolutely. You know, I was thinking about this over the weekend. I'm pretty sure my first day after my switch assignment—because I went back and looked [at] what the key dates were—I think my first day in Lilly was the day that the Supreme Court heard the Chakrabarty argument, which was the first genetically engineered organism patent, because you know, I just remember going in and everybody was talking about it and I was going, "I have no idea what you're talking about."¹

JONES: [Yes], so this is 1978.

WIGGANS: I think it's '78. I went back and looked at the date over the weekend. I think that Chakrabarty went to the Supreme Court on March 17, 1978, which would've been, I think, my first day inside at Lilly.

JONES: [Yes]. And Lilly's already into biotech stuff, right? The molecular biology stuff.

WIGGANS: The buzz was, is this the future of insulin? You know, that was what everybody was talking about.

JONES: That was the number one product, insulin?

WIGGANS: I think so, yeah <T: 20 min>.

JONES: [Yes]. Were you selling a lot of insulin in Jacksonville?

WIGGANS: Well, no. I mean, insulin just kind of went, right? It wasn't very competitive at the time. Lilly, I think, had most of the market, so you didn't really promote insulin much, but it was a big product for them.

¹ Diamond v. Chakrabarty, 447 US 303 (1980) was argued on 17 March 1980 and decided on 16 June 1980.

JONES: [Yes], so that was part of the company's identity at that time already, the idea that biology rather than chemistry would be important?

WIGGANS: [Yes], because I just remember, you know, I was completely—you know, you took all that stuff in college but here it was, right? And I was just kind of getting my head around it, and probably didn't even get my head around it at all, but I just remember people talking: this might be the new way to make insulin and no more pig pancreas.

JONES: [Yes].

WIGGANS: [Yes], so it was kind of a big day.

JONES: [Yes]. So it made an impression. And you're not there long in Indy, right?

WIGGANS: [Yes].

JONES: So, everything's going fine, you're doing the marketing; and did you like it?

WIGGANS: I was doing the marketing. I did like it. I did like it. Two things happened: one was the next logical step was [to] go out as a sales manager. That was the next step on the career path. And I thought, "Wow, I don't want to do that." And then, you know—boy, I've had a lot of lucky breaks in my career—and I got a call from one of my fellow associates who had gotten a call from a recruiter about a job in Boston. He called me and he said, "Guy called me about a marketing job in Boston. I don't want to go there. I gave him your name," and then the guy called me, and I said, "Sure, I'll go to Boston for an interview."

JONES: What did you think you were going to find out about?

WIGGANS: Well, I think what I was starting to think at the time was, "I could be here for twenty years and wake up one morning and say, 'Did I ever really influence a single decision?" So, [...] it was kind of an awakening for me as a very naïve, inexperienced kid to go into these meetings and think something was going to be decided at that meeting. You know, when clearly that's not the expectation either. You know, for some decisions you have a series of things and the decision has to evolve, and I was probably immature and naïve and didn't get that, but I do

remember thinking, "God, I wonder—I could be here for a long time and just wonder if I ever really made an impact."

So, went to Boston, had the interview, remember thinking, "This whole building is about the size of a conference room on the corner of the fourth floor at Lilly."

JONES: Where was it? Where was this?

WIGGANS: It was south of Boston, at Serono, which at the time had really just kind of gotten its legs under it in the US.

JONES: [Yes]. Is that—what is it—Duxbury [Massachusetts] or something like that? What was it called?

WIGGANS: [Fabio] Bertarelli's house was in Duxbury. The offices were in Braintree [Massachusetts].

JONES: Okay. So they're telling you about the company, you know, it's a Swiss—Italian/Swiss company.

WIGGANS: Right.

JONES: You'd never heard of it before.

WIGGANS: Had never heard of it before.

JONES: And how did they present the opportunity?

WIGGANS: Well, the recruiter said it's a medium-sized company. [laughter] He said, "It's a medium-sized pharmaceutical company, they needed a marketing guy, he's going to run marketing, got a couple of new products, you can build it," and I got there and the cab pulled up in front and I remember thinking, "This is not a medium-sized company."

JONES: Well, not the US. Are they counting—

WIGGANS: [Yes]. No, I remember specifically, when I joined Serono their US sales were about \$1 million and their global sales were about \$70 million.

JONES: What was Eli Lilly at that time, by comparison?

WIGGANS: I can't remember. I don't know. Probably hundreds of millions. I don't know if it was \$1 billion then. Hundreds of millions for sure.

JONES: [Yes].

WIGGANS: But, you know, I started thinking, "What fun; move to Boston, see what happens," you know, see if you can make things go.

JONES: No sense of risk really? I mean, you're still young.

WIGGANS: No, no, no. Never crossed my mind. Risk never crossed my mind at that point.

JONES: So you liked Boston?

WIGGANS: [Yes]. I'd gone to Boston a couple of times for Lilly and I remember thinking, "This place is really cool," and [...] thinking, "I could live here; I could do this." Risk <T: 25 min> never crossed my mind.

JONES: You mentioned a couple of products. What were those? They hadn't gotten into the recombinant stuff yet.

WIGGANS: No, but that will come later. That was pretty interesting, too. They had the gonadotropins. They had the fertility hormones. And I joined in '80, in, I think, September or October, and I think—I should've checked this too—I think Louise Brown, the first test-tube baby, was born three months later.²

² Louise Joy Brown was born 25 July 1978.

JONES: And that's—

WIGGANS: It really took off. We'll need to check the dates, but I think—if it wasn't then it was shortly after that. But I got there, you know, and infertility was just fledgling. They were starting to be able to monitor, they were starting to be able to visualize with ultrasound, so the multiple births thing was still a problem, but you could kind of see your way out of the problem and then IVF [in vitro fertilization] hit and it was really exciting.

JONES: [Yes]. So did you realize that when you were doing the interview?

WIGGANS: No, no, no. I thought this was an interesting market, and that's probably all I thought.

JONES: [Yes]. So that took off while you were there. Immediately?

WIGGANS: [Yes]. The Steptoe and Edwards first test-tube baby birth in England, and then the Joneses, Howard and Georgeanna Jones, were trying to slug through how to do it in the US, and then subsequently you had the first US baby was born.³ It was very exciting.

JONES: And so what did that mean to you? You're the marketing director? Is this the job?

WIGGANS: Started as a marketing manager. I was the only one. I was it. I was the marketing guy.

JONES: For the entire US?

WIGGANS: [Yes], well the entire US was, like, I think it was \$1 million and probably most of it—they had a diagnostic business, too—most of it was diagnostics, so there was a marketing manager for diagnostics, and then I was the marketing manager for pharmaceuticals.

³ Patrick C. Steptoe and Robert G. Edwards. "Birth after reimplantation of a human embryo." *Lancet* 2, no. 8085 (1978): 366; Walter Sullivan, "'Test-tube' baby born in U.S., joining successes around the world," *New York Times* 29 December 1981.

JONES: [Yes]. Well, even though it's not Eli Lilly, but this is a position of a fair amount of responsibility and you're still very young.

WIGGANS: [Yes], I was very young. I mean, the guy who hired me—I don't know why he hired me.

JONES: Well, he must've thought you were serious and capable, right?

WIGGANS: [Yes], well, I guess.

JONES: Is that how you would describe yourself at that time?

WIGGANS: I was serious. I was probably capable. I was a reasonably good thinker, I guess. Bertarelli probably told him to hire somebody and so he was desperate to hire somebody. Coming from Eli Lilly was probably a pretty good pedigree.

JONES: [Yes]. And did it help? I mean, the stuff that you learned at Lilly, did you-

WIGGANS: [Yes]. Well, I mean blocking and tackling. [...] What's the product, what can it do, what are the opportunities, what are the issues. So it was blocking and tackling stuff, and then they didn't have a sales force and so I remember pitching personally to Bertarelli we should start a sales force, with five people.

JONES: [Yes]. This is Fabio Bertarelli.

WIGGANS: [Yes], it was the father.

JONES: So tell me about him. He was there at getting this thing—how long had they been there when they were interviewing you?

WIGGANS: The way Bertarelli started [in new] countries, he'd send just one guy over and just say, "You go make it happen," and so he'd send a guy over who'd kind of gotten things started up just barely, you know, and then he hired—I think they started on the diagnostic side because that was probably an easier entry, so that was kind of up and going, then they hired a president

who was—I think he'd been at Baxter—who was a legitimate executive and he was running it when I got there.

JONES: Do you remember his name?

WIGGANS: [Yes], Jack Barlow. Jack Barlow was his name, and he had hired a head of research from Lederle [Laboratories], Jerry [Gerald Earl] Stiles. So, [...] those were real guys.

JONES: [Yes]. So, it was going to be a research operation from the beginning.

WIGGANS: Well, it was going to be pharmaceutical R&D and commercialization.

JONES: [Yes]. What was the relationship between Boston and Geneva?

WIGGANS: For a long time it was very loose.

JONES: Pretty much independent? You're operating-

WIGGANS: Very independent, very independent. [...] You know, so I got there in '80 **<T 30** min>, I became executive vice president and general manager in '85, president in '86, was there until '90, and really right at the end is when it started to go through what every company needs to go through, right? Every country can't run its own little fiefdom and have research and development and manufacturing and everything else. And so it was pretty good when I was general manager. That would never happen now.

JONES: So at the beginning you're putting together a sales force and you're talking to Bertarelli about this.

WIGGANS: I pitched it to Bertarelli and he approved it.

JONES: What was his style? I mean, he's a European and-

WIGGANS: Very, very . . . engaging personality, very idiosyncratic.

JONES: Did it strike you as different, this is something different, you know, this company's different?

WIGGANS: [Yes], very different. He was very different from Eli Lilly, you know, very—I mean, as conventional as Lilly was—you know, when I was there you had to put on your suit coat to walk out of your office. You can't go out in the hall without your suit coat. So, it was at one end of convention, Serono was—it might not have been at the extreme edge of the other end, but it was close. Because Bertarelli—you could kind of do your own thing, but Bertarelli was everywhere, and if you sent him anything he would read it and come back to you. Every single shred of paper. He'd fly over commercially then, and he'd walk into the office and he'd have a stack a foot thick and that's what he read on the plane; and he read everything that people sent to him. And he'd write comments on it and send it back to you.

JONES: [Yes]. So, I mean, that's pretty impressive on the one hand.

WIGGANS: [Yes]. It was also very controlling. It was his company for sure.

JONES: So, I guess in the beginning that's probably not a big issue for you, but maybe it—

WIGGANS: No, not really. You know, I had run-ins with him throughout my career there, but so did everybody. Got yelled at a few times.

JONES: [Yes]. Well, maybe you can tell me about those episodes when . . . [laughter] You got the sales force going, that was your area initially.

WIGGANS: [Yes].

JONES: And then there's this demand, this great demand-

WIGGANS: It was increasing, [yes]. It was exciting just because the technology was advancing. You know, there was a way to control the ovulation induction so you wouldn't—I mean, ovarian overstimulation was a very serious problem. I mean, that was hazardous to your health if you [over]-stimulated the ovaries, so that was a health issue for the female.

And it got so you could monitor the stimulation, so that became not as much of a problem, but multiple births were still a problem, right, because the technique was so—both IVF and just normal ovulation induction, it's not a very efficient process, so in order to maximize your chances you try to get two or three or four eggs and sometimes that doesn't work very well either.

JONES: [Yes].

WIGGANS: Well, in the other extreme.

JONES: So [...] did you have to educate doctors on—

WIGGANS: Well, there was an emerging group, right? Reproductive endocrinology was an emerging specialty and so there were people who were kind of pioneering it. So, there was the IVF side and Steptoe and Edwards were the leaders and then the Joneses in the US.

And then there were just ovulation induction people who were trying to help couples get more eggs and conceive naturally but then they would start to move into IVF as well. So, the whole arena was growing, and I think becoming safer, for sure, and more efficient.

JONES: And your customers are specialized clinics, basically?

WIGGANS: Yes. [...] Some of them could've been OB/GYNs but a lot of them were endocrinologists.

JONES: And so you're having success and—

WIGGANS: [Yes], having success. I think [it] exceeded Bertarelli's expectations. I think when I pitched him the sales force he was probably thinking, "Oh God, I don't know."

JONES: What was your proposal? How <T: 35 min> big did you—

WIGGANS: Five. Five people.

JONES: Five?

WIGGANS: Five people.

JONES: And what was the plan? What were you going to do with those five people?

WIGGANS: We were going to put them in metropolitan areas close to clinics and we were going to learn what they were doing and expand it.

JONES: Well, that makes sense. It doesn't sound too extravagant.

WIGGANS: No, it wasn't too extravagant.

JONES: Five people. [laughter]

WIGGANS: But, you know, I think he—I don't know what he thought, but I think we went from five to nine to maybe fifteen or twenty after that, so it went well. So, I was hired as manager, then it went pretty well so then I was promoted to director of sales and marketing, not just marketing manager, so director of sales and marketing. Then vice president of sales and marketing, and things were going well.

JONES: And you feel like, okay, you know the business, you got a handle on it?

WIGGANS: Yes. I think Serono was my introduction to specialty marketing and it was a small group of very specialized physicians who were dealing with very specialized products and it was—you know, it was easy. Well, it wasn't easy but it—

JONES: Sure.

WIGGANS: What you wanted to do was have a very good relationship with your customers, so I learned that at Serono, to have a good relationship with your customer and know what they needed and provide it to them.

JONES: Wasn't that something they stressed at Lilly? Did they . . . ?

WIGGANS: Eh...

JONES: Not the same.

WIGGANS: Not the same. Not the same, because it's a big company and not the same because, you know, I don't know what our initial target audience at Serono was, but it wasn't very many. I mean, it was in the hundreds of doctors, not the tens of thousands.

JONES: Well, that emphasis on a relationship—is that something that you discovered or was it something that Serono was already doing?

WIGGANS: I think it evolved because there was such a common interest because it was an emerging field, it was such an important area. I mean, this is not of life and death but it's people who wanted to have kids and couldn't, and so emotionally it was very—you know, to be able to make the patients happy was incredible, just incredible.

JONES: [Yes]. These were people who otherwise couldn't have babies, yeah.

WIGGANS: [Yes]. Right. So, between us and the doctors and the patients it was a real bond and it was joyous when you were successful.

JONES: [Yes]. And so . . . president then is the next step?

WIGGANS: [Yes]. I think it was in Boston. I don't think he made me come to Geneva for it. I think Bertarelli—no, I know what it was. I'd gone to Las Vegas [Nevada] for the weekend to see a fight and I walked in Monday morning and Jerry Stiles had been promoted to president after Barlow. He'd been president for a couple years. I walked in Monday morning, he said, "Bertarelli wants to see you down the hall." So, I went in and Bertarelli said, "Today you are the general manager. Get yourself a bigger office and—" He had two pieces of advice that were incredibly mundane, like get a bigger office and don't call me, or something like that, you know? [laughter]

[Yes], so that was it. I walked in Monday morning and Bertarelli said, "You're the general manager."

JONES: Okay, so that's a whole different range of things you had. [...] Is that something that you wanted to do?

WIGGANS: [Yes]. Well, it never crossed my mind. I mean, it just happened. I had not had time to envision that step up. I was happy being head of sales and marketing, things were going great. I don't know what the sales force was by then—thirty, forty—yeah, it was great.

JONES: [Yes], well, that's pretty good. You're there for, what, five years, something like that?

WIGGANS: [Yes], that's right. I'd been there five years.

JONES: [Yes]. So, you've done a lot in five years and-

WIGGANS: [Yes]. But then all those guys that were my colleagues were now working for me and some of them were a lot older than I was. So it was . . .

JONES: Was that a challenge?

WIGGANS: It was a challenge, [yes]. It was. Probably might've been more of a challenge than I appreciated at the time, you know? But things kept going reasonably well.

JONES: [Yes]. Well, what else did—I mean, there must've been some things you just [were] not familiar with, hadn't dealt with before, some aspects of the job—

WIGGANS: [Yes]. I mean, we were small enough that I had been exposed to everything. [...] So, when I became general manager we had a manufacturing facility right down the street from our offices that, I think, was for **<T: 40 min>** either growth hormone or recombinant—or maybe the gonadotropins. I think it was gonadotropins. We had done a deal with a company that was developing recombinant gonadotropins, so [they] were doing research, we were doing the manufacturing.

JONES: What company was that?

WIGGANS: I think it was Integrated Genetics. I think.

JONES: Okay. Bob [Robert J.] Carpenter's company?

WIGGANS: [Yes]. That's right. Bob Carpenter's company. So, we'd done—Serono had done a deal with them to have them develop recombinant gonadotropins and we'd done a deal with Celltech [Group plc] to do recombinant growth hormone.

JONES: [Yes]. And those things had been done—had you been waiting for those products to come—or were they too far out? Are you thinking—when you're doing sales and marketing, are you thinking about any of that stuff?

WIGGANS: Well, it's interesting. First of all, Bertarelli fought it as long as possible. They had a lot invested in extraction technology for growth hormone and gonadotropins, so Bertarelli really fought recombinant technology, and he was fighting it when I got there in '80. You know, it was kind of—it was all kind of starting.

JONES: So how did he fight it? What was—

WIGGANS: Well, he wanted a public relations campaign that it was a new technology, unproven, and you know, we shouldn't go there, so that was his view. But, I think, right after I got there, surely within a year of when I got there, they had a corporate summit meeting in Boston and I was assigned to do all of the background work on our options—options of what would we make and who would be our partners. And I was thinking over the weekend I don't know how I did it. There was no internet then. I mean, you know, how did I get all that information? But they were looking at—

JONES: [Yes]. Do you have that report, by chance?

WIGGANS: No, no, God. They were notebooks. Everybody got a notebook and there were probably twenty people. That was really—it was a high-level corporate meeting.

JONES: That would be an important historical document. [. . .] I wonder if there are any floating around.

WIGGANS: I don't think so. I don't know if there are any floating around. But I did them, I made them. You know, that might've been my breakthrough with Bertarelli.

JONES: Do you recall the research that you did? What did you find out?

WIGGANS: Well, it was all background information. So, they were evaluating gamma interferon, should we make that with recombinant techniques, and if so who were the vendors. Same for gonadotropins and same for growth hormone. And I think we even—it was a multiday meeting—I think we even had people come in and pitch us, because we had the big guys come in, whatever they were—Cetus or, you know, I mean, there were a lot of companies that came in and pitched us, and they had selected Integrated Genetics for the gonadotropins—

JONES: Because they were local or . . . ?

WIGGANS: I don't know. They were not the marquee contender, that's for sure because—but there was only vote so, you know, twenty people in the room and one guy decided so . . .

JONES: [Yes].

WIGGANS: Celltech got the growth hormone.

JONES: Is that UK [United Kingdom]?

WIGGANS: [Yes]. And I think we decided maybe to pass on interferon. I can't remember the outcomes, but I—

JONES: Oh, no, I think you-wasn't there somebody in Israel working on interferon?

WIGGANS: Yes, yes, that's right.

So that was a really important meeting. Boy, I wish I had that notebook but, you know, for each project there were probably three or four vendors and I had done the background information, and I think we walked out of the meeting, Bertarelli having picked people to go and do a deal with.

JONES: [Yes]. [Yes], okay. But what was the expectation for you? I mean, so you're dabbling in this, you're figuring this out, but it's not going to have a big impact on what you're doing for a while.

WIGGANS: Precisely. [Yes], exactly right. [Yes], that was that was not my day-to-day thing at that time.

JONES: But you think that [...] what you did impressed him enough to think that maybe this guy could be the next president?

WIGGANS: [Yes]. I think two things impressed him, that and he would call at all hours.

JONES: Really?

WIGGANS: [Yes], obviously. And he would call really early in the morning sometimes and I'd be the only guy in the office, and the office was very small and [if] any phone rang you could pick it up, so he would call all the time early in the morning and I was the only guy there and I'd answer it, and I think he liked the fact that—

JONES: What were his concerns? He's calling—what's he calling about?

WIGGANS: He's calling—he'd call to talk to somebody, to talk to somebody because he might've just read a memo and he would just pick up the phone and call them and ask them about it. No lengthy bureaucratic process, right? If he either had an idea or wanted you to do something or he had a question, he'd just call you.

He called me in the middle **<T: 45 min>** of the night one time and he didn't—he forgot, he claimed—that it was the middle of the night. And I said, "Fabio, it's 3:00 AM," and he goes, "Oh, I'm so sorry, I'm so sorry," but I think he—I'm not sure he was sorry or not. [laughter]

JONES: Did you enjoy working for him?

WIGGANS: I did, yeah. There was-

JONES: He sounds like a character.

WIGGANS: He was a character, yeah. He was a real character. Just a different management style. You know, just what you would think. You know, he had his clique around him. In the mid-eighties—this is my view, but I'll stick with it—he became enamored with the US, so the fact that the US was growing very rapidly was very exciting to him. He opened a satellite corporate office in Boston, he was obviously doing work with Integrated Genetics. He loved the US market, he loved the US. So it was really high on his radar screen then. I think after a while he got tired of me and the US in general, but . . . [laughter]

JONES: [Yes].

WIGGANS: For a while he came over all the time. We did limited partnerships here to raise research money, he bought a gigantic ranch in Arizona.

JONES: Really?

WIGGANS: And he was here all the time.

JONES: And spending a lot of time sailing, I assume, up in . . .

WIGGANS: [Yes], I don't know—you know, I don't remember that. He must've because—or Ernesto [Bertarelli] picked it up on his own, I don't know.⁴

JONES: He never talked about sailing?

WIGGANS: Not really. You know, I went to his house in Duxbury a few times, but I don't ever remember going sailing with him.

⁴ Fabio Bertarelli's son, Ernesto, became CEO of Serono in 1996. He is an enthusiastic sailor; he founded Team Alinghi which won the 2003 America's Cup.

JONES: [Yes]. [Yes]. But he was—would you call him challenging? Was he difficult? I mean, he's a little—you know, calling at 3:00 AM, that's one thing, but in terms of—did he get in the way of stuff that you wanted to do or thought needed to be done or . . . ?

WIGGANS: He was very eclectic as a manager. I remember when I went—I'm getting ahead of myself, but as an example—I went to the UK. When I went to the UK as general manager, again, you know, he'd give you like two pieces of advice and one of them was, sell the diagnostic business. We had a lab over there, and he said, "One thing, sell the diagnostic business."

JONES: That's a pretty big piece of advice. [laughter]

WIGGANS: [Yes]. And so I spent a lot of time doing it. I ended up getting a price a lot more—I mean, it wasn't a lot. I don't know whether it was \$10 million or \$20 million or—I can't even—

JONES: More than he expected?

WIGGANS: More than he expected, and I went in and said, "Okay, I've got the deal," and he said—I'll never forget—he said, "I don't understand why you want to do that. We're not going to do that." Just like that.

JONES: He had said, "Sell it."

WIGGANS: Sell it.

JONES: And then—

WIGGANS: [Yes]. And the first time—you know, we did a road show in the US to take the US company public, and he decided the night before, not going to do it, so . . .

JONES: Hmm. That's a little difficult. I mean, to—yeah?

WIGGANS: [Yes].

JONES: So what were you thinking when—just out of the blue, "Okay, no, we're going . . . " [laughter]

WIGGANS: [Yes]. I think you just kind of got used to it, that it was—so, you know, I'd only been with Lilly and inside for two years, so I learned pretty quickly that corporate processes frustrated me but I never really got so I probably should've appreciated them more than I did, right? There's a pretty good way to make decisions and I'm sure Lilly had a pretty good process. I was only there for two years and I never really learned it, so I grew up with Bertarelli as my mentor, and so it just—that's the way it was.

JONES: [Yes]. Well that kind of inconsistency, did it ever make you wonder, you know, if maybe this isn't the way to do this and maybe this could be bad for the company?

WIGGANS: You know, well, I think you always say you learn things and you learn things not to do, so yeah. I think part of that—but you know, it was interesting because—and again, it was probably not the greatest management technique. You know, at the highest level you kind of got to run the US business. I mean, I had to go present the budget every year but, you know, once you got the budget approved you kind of ran the business. So, the good news is you kind of got—at the highest level you got to run the business and then the stuff he killed you on was all the little detail things.

JONES: [Yes]. But you really had an opportunity to shape You felt like, you know, this is mine . . .

WIGGANS: Yes, yes. Absolutely.

JONES: [Yes]. And who is helping you along the way? I mean, you're growing up in positions and you're then bringing people in to help you, right?

WIGGANS: [Yes]. So, **<T: 50 min>** when I took over as general manager, the head of R&D, the head of manufacturing, stayed. The head of finance stayed but then transitioned out, so I replaced finance. I hired and promoted all the commercial people, regulatory people, manufacturing people.

JONES: [Yes]. So, you've got a lot invested in this. I mean, it's almost like this is your-

WIGGANS: It was—yeah, it was humming by then. You know, kind of the late '80s, you know, when we were doing, I don't know, \$80, \$100 million at the time. That was a pretty nice business.

JONES: Had the recombinant products hit by then or did—

WIGGANS: The recombinant products had not hit.

JONES: [...] And you're there until what, 1990?

WIGGANS: I left in '90, had—I can remember one near-death experience, because part of the budget wasn't—you know, gonadotropins for a long time were a combination FSH [follicle-stimulating hormone] and LH [luteinizing hormone].

JONES: [Yes].

WIGGANS: And then the technology evolved, and you really only needed follicle-stimulating hormone initially. You should give those separate, not together. So, we were developing FSH. It was part of the budget. We said we were going to get approved, we said we were going to launch it. It was going to—it was a critical part of the budget. Kind of got to be, like, November and it hadn't gotten approved yet, and I got a call from a corporate attorney, and he said, "Bertarelli's going to call you into his—" It was like the mafia—he said, "You're going to get called into Boston and you're going to get fired," and the next week we got approval. [laughter] And I never went to the showdown.

JONES: [Yes]. Was that concerning you at the time? Did you think that was right? I mean, it's not the kind of thing where you can just snap your fingers and—you know, it's not like you have control of the entire—

WIGGANS: [Yes], I don't know. I don't really remember other than, you know, that I didn't disbelieve him. I figured his sources were good, but I don't remember worrying about it that much.

JONES: [Yes]. But then he asks you to go and pick something else that was-

WIGGANS: [Yes], he did, although I think it was a little bait and switch in retrospect because what they said is, "We're going to reorganize so we're going to go to four regions, and we're looking for the four guys who are going to—or three, I forget what it was—there are going to be three regions; the Americas, Europe and all other, and so there's going to be a new level of management created and you should probably get some experience to do that."

So I said, "Absolutely. Send me overseas. I want to do it, I want to get that experience. I want to be one of those guys," because the US and Italy were the two biggest affiliates by then and Spain was growing rapidly, so it was kind of the Spanish general manager and me were the guys who were really making it happen.

So I thought, "I'm going to go do that, I'm going to get one of those jobs and off to the next step," and so I was over there for, like, six months and they named them and I wasn't one of them.

So I was in London thinking, "Shit, this affiliate is 20 percent of the one I left, but I came over here to get the next job and I'm not going to get it."

JONES: [Yes]. So, what do you think is going on there?

WIGGANS: I think Bertarelli got tired of me.

JONES: Tired of you why, in particular? I mean, there's some friction there?

WIGGANS: [Yes]. What I was told is that, you know, I was pretty visible as the US general manager and that probably didn't go over very well with him. I had a big fight with him over a new R&D position that never really got resolved. So, stuff like that.

JONES: [Yes]. So that's a little difficult and probably the first time in your career where you really hit that kind of turbulence?

WIGGANS: A little turbulence, but then, you know, [...] I think he wanted to get me out of the US, just, you know, for the record—if this is the official record—I think he wanted me out of the US, because after I left, you know, there were some stories that were kind of the story that appeared in the local paper was, "didn't make budget, relieved of duties, sent—banished—to the UK." Some PR guy in the corporate office was responsible for that, and he lost his job shortly after that, but he wouldn't have done that without somebody else telling him to do it.

JONES: [Yes]. And how was the business doing? It was still ...?

WIGGANS: The business was doing good. We had a big miss on the budget and so I said, "We'll get it next time," and **<T: 55 min>** it was probably my mistake because I thought we would get it back and we didn't. I missed understanding the business.

JONES: Were you involved in—the biotech industry is going at this time and, you know, starting trade associations—I mean, you're involved in the BIO [Biotechnology Innovation Organization] thing—⁵

WIGGANS: Right.

JONES: —a little later. Were you involved any time before that?

WIGGANS: [Yes]. I was actually—let me see. The IBA was the big one: Industrial Biotechnology Association. Then there was a little one.

JONES: The ABC [Association of Biotechnology Companies].

WIGGANS: ABC. And so we were always in the ABC.

JONES: Tell me about that. How did you get into it? Was Serono already part of it when you came on or . . . ? I don't even know when the—I'm not sure when that organization was established.

WIGGANS: Well, whenever it was established, we were in pretty early on because the IBA was really the big guys and I don't know how we got into the ABC but that's where we ended up. And so I ended up being the president of the ABC the year that Steve Duzan was the president of the IBA.

⁵ The Biotechnology Industry Organization (BIO) was formed by the 1993 merger of the Industrial Biotechnology Association (IBA) and the Association of Biotechnology Companies (ABC).

JONES: So is this late '80s we're talking about?

WIGGANS: [...] It would've been '87, '88. And both groups realized we were really not being very effective because we were always at odds.

JONES: Do you remember some of the issues—you're president, so what were some of the—

WIGGANS: Absolutely. Well, the issues were—there were a couple of issues. One was the orphan drug law that I was a real outlier on. If you talk to Henri Termeer he probably thinks I was the biggest jerk on the planet, because Genentech had orphan drug exclusivity for growth hormone and were blocking us and, you know, we were going after them and that was tough to go after them.⁶ [laughter]

JONES: [Yes]. Well, what did you want to change?

WIGGANS: We wanted to change the law, so we were lobbying like crazy to change the law that—

JONES: In what particular aspect of it? So, I mean, you're arguing that this drug is too big to be a—yeah.

WIGGANS: [Yes].

JONES: So what did you want to change, the requirements for [...] orphan designation?

WIGGANS: [...] I think there would be a patient as a well as a financial hurdle that you had to get over or stay under or something like that so . . .

JONES: [Yes].

⁶ Orphan Drug Act of 1983, 21 U.S.C. ch. 9 (1983). See also Henri Termeer, interviewed by Ted Everson, Jennifer Dionisio, Pei Koay and rnold Thackray, on 23 May 2006, 7 December 2006, 2 August 2007, 18 December 2008 and 30 September 2011 (Philadelphia: Science History Institute), Oral History Transcript #342, in process.

WIGGANS: [Yes]. That's very old news at the time, but there were a lot of things that the two associations were kind of at odds over.

JONES: [Yes]. That's one. What were some of the other issues?

WIGGANS: I don't remember. I really don't remember what the others were. Have you interviewed [G.] Kirk Raab yet?

JONES: I haven't interviewed him, no.

WIGGANS: Henri Termeer would know; Kirk would know Carl [B.] Feldbaum came on after that. He came on when we merged. So I don't know who would know the issues, but it was [...] a big company/small company thing and we thought we were getting crushed and they thought that—yeah, it wasn't working, and so we weren't getting anything done because we were always fighting and so ...

JONES: So from your point of view, that was bad in Washington, too, the fact that [...] there was no sort of solidarity here in the industries and you felt that it was not just the competition there but the fact that it was interfering with getting stuff done in Washington?

WIGGANS: [Yes]. And at the same time, I didn't agree with the IBA's position on the orphan drug thing. I think there was a rising awareness that two voices were bad; one voice would be a lot better. [...] I don't know how I got tagged to do it. I was president at the time. It's probably a miracle it got done, because Steve Duzan and I had plenty of, you know, not pleasant conversations about how it was going to come together, but we—

JONES: You guys are battling?

WIGGANS: [Yes], just, you know, how's it going to look and structure. I mean, God, you know, I can't believe we negotiated that, but I think it was pretty much Steve and I, and then I had a committee that was very good, that helped me.

Because I remember we were going to take it to a vote one time and I was going to do it, and Mitt Sayer **<T: 60 min>** a couple of other guys said, "Don't do it. You cannot go yet. It's too early, you are going to lose, and it's going to be a setback and don't do it," and we didn't do it. They were right. We took another run at it and we got it teed up so it was ready to go, and the

wildcard was Kirk Raab. And I went to the IBA annual meeting and when Duzan introduced it, Kirk stood up and said, "I second the motion."

JONES: So he was at Genentech by that time.

WIGGANS: [Yes]. And so that's-

JONES: That did it.

WIGGANS: That did it, yeah. So it was great. There were people in the—well, I was going to say it was tougher for the ABC because there were some members who didn't think we should merge, that we would just be subsumed and, you know, that was what I had to fight against, the people saying, "If we do this merger, the little companies will never have a voice." That was what I had to control on my side and Steve Duzan, I'm sure, had to control on his side the big companies going, "Why do we need these guys? This is just an incredible annoyance." So . . .

JONES: But it's—

WIGGANS: But, it worked.

JONES: [Yes]. Do you think Serono was—I mean, it was just a historical accident that your name be seen? Because it was actually a pretty big company by that time. It doesn't really fit with the others or . . . ?

WIGGANS: [...] As I recall—I can't even remember the specifics—I think I was probably closer to the organizers of the ABC when they started it up. Because I remember the first ABC annual meeting. I bet it had twenty people there. There was nobody—I mean, there was just—so I hung with the group. We were invited to join that, we started it up. It grew very rapidly. The last ABC convention before the merger was in North Carolina. It had probably a thousand people there and, you know, it was rocking by that time, so I think the idea—he was going, "God, look at all those little companies. At least they have a pretty big meeting." So that was good, but just started out with the ABC and I think once you cast your lot back then you didn't cross the fence.

JONES: [Yes]. So you put them together. Did it take a while to—were you involved in sort of working that out beyond that point or . . . ?

WIGGANS: Once it was done then there was a search committee that I was on that hired Carl Feldbaum. One of the solutions to the big versus small thing was the emerging company section, which is still part of BIO. So I was on that. And I think I was on the executive committee of BIO for a while.

JONES: [Yes].

WIGGANS: [Yes], so it worked well, I think.

JONES: [Yes]. And Carl was not a universally—you know, there wasn't unanimous agreement that he was the right guy, right?

WIGGANS: Right, right. But there were a couple of people—and I can't remember who they were, honestly [...]—but a couple of very powerful people thought he was absolutely the right guy, and so that's what carried the day.

JONES: [Yes], what was your feeling on that?

WIGGANS: Mixed. Carl, sorry. [laughter]

JONES: And he was a Washington guy, right?

WIGGANS: He was a Washington guy, yeah.

JONES: So that's on his side, but then the argument against is that he doesn't know the pharmaceutical industry or—yeah.

WIGGANS: [Yes], or the biotech industry. That was—I think the IBA probably—I could be proven wrong—I think the IBA might've had a couple of big pharma companies then but not really, right? PhRMA [Pharmaceutical Research and Manufacturers of America] was pharma and IBA was big biotech.

JONES: [Yes], that's right.

WIGGANS: And so it was very different. [...] So Carl—yeah, I think the feeling was, you know, this guy is a Washington insider but he doesn't know biotech. But there were a couple of people who thought he was the right guy and they prevailed.

JONES: [Yes]. Well, you're in London, is that what-

WIGGANS: Right.

JONES: In '90, '92. Are those the years?

WIGGANS: [Yes].

JONES: What did happen to the diagnostics portion of that? Did it not go anywhere? [...]

WIGGANS: Our little lab didn't go anywhere. It was still there when I left, and Serono ended up selling its diagnostic business after I left.

JONES: [Yes]. Okay. So that's the end of your time with Serono. You're stuck there, right?

WIGGANS: [laughter] I'm stuck there. [Yes]. Another thing, you always should negotiate under what circumstances you get brought back, right, even if it's just a one-way ticket back, but I had not negotiated that **<T: 65 min>** part. So I was over there in no man's land.

JONES: [Yes]. So what are your thoughts at that point?

WIGGANS: Well, you know, again kind of lucky. Before I even thought about, "Am I stuck here," right? Every day that goes by I become less remembered in the US. And I remember one guy telling me that. He said, "You've got to get back soon. A year from now people [...] are going to be looking for people for jobs and they're not going to be thinking of you." But before that really sunk in, Seth [A.] Rudnick called me and asked me if I'd be interested in working with him at a cell transplantation company.

JONES: [Yes], and he was in Boston?

WIGGANS: He was in Providence, Rhode Island. But interestingly, when he was at J&J [Johnson and Johnson], I had tried to hire him at Serono, couldn't do it, but we kind of developed a good rapport. And so then he called me and said, "Do you want to be the business guy for my new company [CytoTherapeutics, Inc.]?" So I did.

JONES: So this is something—again, this is something completely different, right? This is a real startup?

WIGGANS: [Yes], it was a real startup, pre-IPO.

JONES: [Yes], and I guess by that time there were lots of biotech startups around but it's still—well, what was your perception of it?

WIGGANS: You know, it's funny, I hung around with all of those guys, but I don't think I was part of the startup culture. I just hadn't done it. It was—you know, I was more of a pharma guy, I guess. It's funny, I was hanging around with them, but nobody ever called me and asked me if I wanted to do a startup. Nobody called me and asked me if I wanted to go be with a startup until Seth.

JONES: [Yes]. So it wasn't part of your image then, I guess.

WIGGANS: Maybe not. Maybe I was more of a pharma guy.

JONES: [Yes]. And were you thinking in those terms? Did you—

WIGGANS: I don't think so. [...] For as much as I've enjoyed being an entrepreneur since then I wasn't an entrepreneur then, although Serono was an entrepreneurial experience. When I got there, you know, it was ten people and \$1 million and, you know, we grew it and it was a blast and that's when I said, "I will never go back and work for a big company, a big pharma again."

JONES: Right. So were you thinking, you know, this is a chance to do that again?

WIGGANS: I think so. [...] At that point, again, I wasn't thinking risk, but I was thinking we could—you know, Seth and I could make this great.

JONES: So you thought—well, tell me about the company and where it was at that time and funding and the whole thing.

WIGGANS: It was pre-IPO—

JONES: Tell me about the initially how did it—literally he called you up and said . . .

WIGGANS: I think so. Or maybe it was a recruiter. I don't know how I was contacted, but Seth and I had known each other, I had a lot—still have—a lot of respect for him. And so he said, "Do you want to come over and talk about this job?" So I did, and the technology was intriguing, right? You engineer cells and implant them for Parkinson's disease and diabetes. It's—

JONES: And these are not stem cells.

WIGGANS: No, they're not stem cells. They are probably harvested, purified cells. I don't think they were genetically engineered. [...] So one of the holy grails that remains so.

JONES: [Yes], right. Interesting idea. [laughter]

WIGGANS: [Yes], exactly. [Yes]. In fact, just to jump ahead, I mean, I got there, I was there for a couple of years and that's where I ended up, was: "interesting idea." I'm wondering whether my grandkids will ever see this technology commercialized so . . .

JONES: [Yes]. [Yes], well things are-yeah. I mean, it takes a long time to do anything in-

WIGGANS: Right.

JONES: And it's hard to tell just how far off it is, but this is a time of great optimism, of course.

WIGGANS: Yes, very exciting, and to be kind of on the cutting edge and hanging around all those scientists. [Yes], it was great.

JONES: And so, you know, what shape was the company in, initially? Was there a company there or is it really literally you're choosing the wastebaskets?

WIGGANS: No, no, there were probably twenty or thirty people there. Seth, I think, had come in—it was actually up and running. Seth took it over.

JONES: [Yes]. Okay.

WIGGANS: So he was the second CEO, I think. . . . So it was up and running.

JONES: Where did the money come from for that?

WIGGANS: Mayfield [Fund].

JONES: [Yes]. Where—was it out here?

WIGGANS: Providence.

JONES: It was in Providence.

WIGGANS: [Yes]. So we just did a roundtrip, moved back to Boston and I commuted down to Providence every day, so we were back in Boston. And enjoyed working with a team. Started to wonder about the technology. I started pitching the board on a diversified strategy of, **<T: 70 min>** like, going back to my roots, and they were probably going, "This doesn't make any sense at all," but I started pitching them on, "Let's bring in some commercial products. Let's start a company here. And then we can do the research, but we'll have a real company," and I don't think the board liked that.

JONES: Were they—they had faith in the technology?

WIGGANS: [Yes]. I think—I mean, they were in the "We are going to make this work and it's going to be huge or it's not and that's the way we operate."

JONES: [Yes]. And then Seth is committed to the technology as well?

WIGGANS: [Yes], Seth was committed to the technology.

JONES: And [...] the hang-up was you couldn't get it into clinical trials or didn't perform in clinical trials or what?

WIGGANS: [Yes], it was because they were nonhuman cells, you know, you had to have them encapsulated in a very fine environment, right? You had to have enough oxygen and nutrients that they don't die but you can't have them very exposed to the immune system either. So that was—

JONES: Were there any regulatory issues, special ...?

WIGGANS: [Yes], well, as I recall, I don't think we ever got to the clinic. [. .] I'm sure there were after I left but we were still trying to make it work in animals when I left. Trying to get the rats to not exhibit Parkinsonian behavior.

JONES: [Yes]. So that one—nice try but it didn't go.

WIGGANS: Nice try. And again, you know, about the time I was thinking, "I like companies with a better chance of getting commercial than this," and I think the board was probably thinking, "This guy wants to go commercial here, he just does not get what we're all in it for." And coincidentally, I got a call about a startup in California. The recruiter was the wife of one of our board members, and I'm not sure it was coincidence. [laughter]

They were probably going, "Get this guy out of here," so . . .

JONES: [Yes].

WIGGANS: Came out.

JONES: So this is Connetics.

WIGGANS: This was Connetics. Connective therapeutics.

JONES: All right. And what was the situation then in 1994?

WIGGANS: Connetics had a product called Relaxin that they were looking at for scleroderma, which is a terrible disease and easy to get excited about, boy, what a difference that would make. Serono actually had tried to develop Relaxin for a different indication, so when they said, "Hey, we got a new indication for Relaxin," I remembered Relaxin.

JONES: So it's a bio—is this a hormone?

WIGGANS: It was—at Serono it was extracted, but the Relaxin from Connective Therapeutics was a genetically engineered hormone from Genentech that Genentech had tried for an indication—it had failed. They had spun it out, and so here was opportunity number two that I thought, "God, let's go to California. Let's try it."

So at that point, I think I had kind of moved into, "Hey, that's where the action is, let's try it out there." And my wife was going, "Boy, I never wanted to live in California. Do we really want to do this?"

JONES: She didn't like California?

WIGGANS: She does now. She loves it now, but we liked Boston. Boston was a great place, you know?

JONES: [Yes].

WIGGANS: If you've never—I mean, if you grew up in Kansas and then lived in Boston you just don't know any better, right? That's just the way the weather is. It's always shitty.

[laughter] So, bless her heart, she supported us and she came out here. We had two little kids and we came out here.

JONES: [Yes]. And did you think this opportunity was going to be a lot different than CytoTherapeutics? That there's a real chance for commercialization? Or that was the focus?

WIGGANS: Yes. Well, and we had a board who included Gene [Eugene A.] Bauer, who we still work together to this day. We had a board who was open-minded about, "Hey, we've got a product, we see a path to commercialization. It would be good to actually pre-build commercial activities before we do that." Some companies were trying that at the time. I'm not sure anybody ever did it very well, but it was a possibility at the time.

So it was an opportunity to try it and, you know, the investors were very excited—or they claimed they were very excited—about me coming out. One of them said, "You know, the most talented guy that's ever not been the CEO of a biotech startup." **<T: 75 min>** And I said, "Geez, I hope you're saying that a year from now." [laughter] So they recruited me and came out and it was great.

Not without its catastrophes. I mean we had, you know, really spectacular product failures.

JONES: [Yes]. Well, this is a classic biotech story, right?

WIGGANS: [Yes], it was the Stanford case.⁷ I'm very proud of the Stanford case about neardeath experiences, how the Relaxin trial failed and, you know, kind of rebuilt the company.

JONES: Go ahead. Tell me about it.

WIGGANS: Well, you know, when I got here we had three technologies. One was just—it was pretty easy to see that's not going anywhere. Then there was gamma interferon from Genentech for—I think it was for atopic—was it for atopic dermatitis? I think it was.

JONES: [...] Was there a Genentech connection here?

⁷ Robert Chess, mark Leslie and Joshua Spitzer, "Connetics and Relaxin," Case No. E200, Stanford University Graduate School of Business, Case Studies, 2006.

WIGGANS: [Yes]. So the two founders were Ed [Edward P.] Amento, who was a scientist at Genentech, and when these programs got de-prioritized he asked to spin them out. So Ed Amento and Gene Bauer, and Gene Bauer had actually treated a patient at Stanford with scleroderma with Relaxin and they thought they saw therapeutic activity. So, you know, two really good scientists, a great mission, and really just a great time to think about making a difference for some patients that were really in tough shape.

And then we did a great job of executing two colossal product failures. So gamma interferon failed first and then Relaxin failed in spectacular fashion.

JONES: When you say spectacular, was this, like, phase three approaching-

WIGGANS: [Yes]. Phase three, you know, huge run-up on the stock, closed at \$27 on Friday, made the announcement on Sunday, opened at \$6 on Monday, I mean, just terrible Terrible. Unwinding the clinical trial, telling patients that there was no evidence of activity.

JONES: [Yes]. So, I mean—these are hard days in the business. [...] So what's that experience like to just see the whole thing just kind of—

WIGGANS: It was just—and on one hand you do it. You know, you're probably—well, my experience was—because we had plenty of others after that—at the time, I just remember doing it, you know? This is really crappy and you just—you just do it.

JONES: You have to do it.

WIGGANS: You just have to do it. You know, once there was a little space between just doing it and then actually thinking about it afterwards it's even harder, but, boy, I remember—you talk to investors, you talk to employees, you talk to investigators for Relaxin. It was tough. But, you know, what we had done is—and this is kind of the subject of the Stanford case—what we had done is the board had agreed to go ahead—assuming Relaxin works, and dermatologists [were] one of our targets, we could go ahead and build a pre-commercial business.

So we actually had one product on the market and selling it and we had just gotten the approval for a second product to launch and so the decision that we had to make was, do we go back and keep working on Relaxin, maybe at the expense of the derm business; do we try to sell those products, monetize them and invest in Relaxin; do we just focus on the derm business, or do we do both? And in typical fashion we went to the board and said, "Let's keep doing both," and about a week later one of the directors called me and said, "You know, the board agreed to

do both but I would just ask you to think about it," and so I did and we came to the decision to jettison Relaxin, focus on the derm business, which was, you know, great.

JONES: [Yes].

WIGGANS: So we went from, like, \$7 million to \$200 million.

JONES: [Yes]. And, well, what were you giving up there? The possibility [that] it's a really huge thing?

WIGGANS: [Yes]. We were giving up the possibility that we could make it work. You know, kind of walking away from a patient population that needs a therapy.

JONES: Right.

WIGGANS: So it was tough.

JONES: But you're following—I mean, you developed commercial instincts, right? This is the way to run the company—

WIGGANS: [Yes]. You've got to-

JONES: Right there for the company.

WIGGANS: [Yes], you [...] look at all the factors, and I think **<T: 80 min>** on—you know, the interesting thing, Relaxin ended up and is currently in the hands of Novartis because what we did see in the clinical trial was no effect on scleroderma, but we saw cardiovascular changes that were kind of interesting that we just—I mean, we couldn't have pursued them because, you know, that was multi-hundred million dollar development program and we could've never done that and we couldn't have financed it. So we took the small-ball approach and grew the derm business and, you know, that turned out okay.

And there was a great phase two clinical trial on Relaxin. Novartis tried to get it approved with a single phase three trial. The FDA [US Food and Drug Administration] rejected it. I hope I live to see the day that Relaxin will eventually make it to the market. JONES: [Yes]. And where did it go first?

WIGGANS: [...] So Genentech to us, us to a company called BASS Medical which was looking at it because the thought was, well, if it remodels connective tissue could you use it to improve the efficiency of Invisalign or, you know, the braces you put in, rather than having braces, you use these things to kind of move your teeth.

JONES: [Yes].

WIGGANS: And so somebody said, "Hey, if it remodels collagen and connective tissue maybe that'll work better." It did not. Then it went to a company that focused on the cardiovascular benefits that got great phase two data and Novartis bought the company. So . . .

JONES: Okay. An interesting molecule.

WIGGANS: A very interesting molecule. You should write a book on that. I would love to have a book written on that.

JONES: It's a good idea.

WIGGANS: The twists and turns of that story, I swear, is the best in the industry.

JONES: You know, it'd become a good book if it gets approved.

WIGGANS: If it gets approved, [yes]. It would. And you

JONES: I'll keep an eye on it.

WIGGANS: There are three people who will—for absolutely no financial anything—will give you all the support you need to write that book and it would be great.

JONES: So, you and . . .

WIGGANS: Dr. Bauer and one of the other scientists.

JONES: [Yes]. Okay. I'll keep that in mind.

WIGGANS: And, you know, the twists and turns, I mean, the stories—if we could find somebody at Serono when Serono had it. They were developing it and they killed it because it failed in an assay and they got the wrong cells for the assay and, I mean, it is unbelievable, that story.

JONES: [Yes]. That's good to know.

WIGGANS: It's magnificent. So I hope it gets approved.

JONES: Well, [yes]. Okay.

WIGGANS: So Novartis—we could find out, are they doing another study? They tried to really get expedited approval in the US and they probably should've, but the FDA said no, so if they do one more study maybe they'll get it approved because it really is a great drug for heart failure. Lowers blood pressure without increasing kidney problems, which was an observation we made in the scleroderma trial, but didn't have the resources to develop it.

JONES: [Yes]. [Yes]. So whose decision was it actually to ...?

WIGGANS: We went back to the board—

JONES: When you say we . . .

WIGGANS: So after I talked to John, the board member, we took it back to the board and said, "We have a modified strategy. Let's focus on the derm business."

JONES: [Yes]. I mean, was this really your decision, your call?

WIGGANS: [Yes]. [...] In retrospect, was this a subtle threat? I mean, was he saying, "Hey, the board voted to keep going on both but I'm telling you that they don't like it," or was he just saying, you know, "I would just ask you to rethink?" I don't know which he was telling me, but I did rethink and we made the right call.

JONES: [Yes]. So where did the other products come from? You had two, yeah?

WIGGANS: We had two. These were the foam products that Connetics came out with. We put dermatology products in a foam delivery system. And the reason we—I mean, we were kind of looking for derm products: "How can we build a commercial group to get ready to sell our real products?"

So we'd been looking, but the way we found this is our business development guy was walking down St. James Street in London on another deal and ran into a guy he knew who said, "I'm representing an Australian company, they've got this interesting technology, would you guys be interested?" And he brought it to the board and the board went collectively—including me—"I don't really think so," and Gene Bauer was the guy who said, "You guys don't understand. This will be a great delivery vehicle for dermatologists," so that's how **<T: 85 min>** we got it. I mean, it was—ran into a guy on the street. That's how we find it.

JONES: [Yes]. And Gene was right about that.

WIGGANS: Gene was right about it.

JONES: And what was his background?

WIGGANS: He's a dermatologist. He was chairman of Stanford when he founded Connetics, then became the dean of the medical school.

So, and the board said, "Hey, if Gene Bauer thinks it's good, let's do it," and so we got it, and so we licensed that product, then we licensed another product, then we licensed all of the technology and then we ended up buying the company. So we bought the Australian company and they were cranking out foam products, and if I had a dollar for everybody that came up to me and said, "I can't believe we didn't think of a foam delivery system," I would have a lot of money, but it's one of those things, right? You know, nobody had thought of it and it worked great. **JONES:** [Yes]. So for you personally this is a great success, right? So—

WIGGANS: Connetics?

JONES: So twelve—yeah.

WIGGANS: [Yes].

JONES: Twelve years later it's a—yeah?

WIGGANS: [Yes]. Because—so I got there in '94, to Connetics. We took it public in around '97, launched the derm around 2000, you know, failed with Relaxin in 2001 or '02, I think, and then built a business and sold the company.

JONES: [Yes], and it was a pretty big company by the time—

WIGGANS: [Yes], \$200 million in revenue and four hundred employees.

JONES: [Yes].

WIGGANS: And I think a really good reputation in the derm space. Back to my Serono customer service experience. You know, there aren't a lot of dermatologists but it's a good group to interact with and they don't have a lot of companies bringing them new products and it's good when you can.

JONES: [Yes]. And this was a good product to have, right?

WIGGANS: It was great. So, I mean, we had two foam steroids, a foam antifungal, a foam antibiotic, and patients loved it. [Yes], so it was great.

JONES: [Yes]. So 2006, tell me about selling the company. How did that come about?

WIGGANS: [...] Stock had dipped and we got an unsolicited offer and, you know, how those end.

JONES: [Yes]. Did you—were you trying to fight it?

WIGGANS: [Yes]. I mean, we fought it in that what you usually do—you go see if anybody will pay you more and you tell them you're not for sale. That's what everybody does, so it's not like I'm saying anything—you do a market check. You see if you can find anybody to sell more and you tell the person who bid in the first place it's not nearly enough and try to get them to offer more. And we got them up a couple of bucks, I think, on the share price and sold the company.

JONES: [Yes]. So it's another fork in the road for you at that point, but this time it's different. You've got a success to—

WIGGANS: Right.

JONES: [Yes]. So what was your plan?

WIGGANS: Well, we closed the deal on December 28th, my 55th birthday, and when we moved to California, at the insistence of somebody that—I don't even know why we did this, we had no money—but they said, "You should meet with a financial advisor," and the financial advisor said, "What's your goal?" And I said, "I want to retire when I'm 55."

JONES: Did you?

WIGGANS: No, but we closed on my 55th birthday and I got the call. I was playing golf with Leon Panetta at Spyglass [Hill Golf Course].

JONES: Leon Panetta?

WIGGANS: He was on our board [...] at Connetics. So we were playing golf and they call me and said the deal was closed, and I said, "I achieved my goal. I could retire now if I wanted to."

JONES: [Yes].

WIGGANS: And started immediately looking around to do the next thing.

JONES: You never really considered retiring?

WIGGANS: No, no. No, like two days later I'm upstairs in our office and my wife comes in and she said, "You know, this is usually the time I'm in this office. What are you doing here?" [laughter]

JONES: Oh, I meant to ask about your wife because—kind of interesting. She's got a nursing degree and then an MBA.

WIGGANS: Right. [Yes]. Well, we met at Serono.

JONES: Did you?

WIGGANS: [Yes]. We met at Serono. She was in regulatory affairs, and we met because she wanted to get into marketing, so she was bugging me about getting into marketing and that's how we met.

JONES: [Yes]. Okay. That's interesting, you know, a nursing degree and then an MBA. That's kind of unusual.

WIGGANS: [Yes], she **<T: 90 min>**—well she was in regulatory affairs. She'd also been a clinical trials associate so, you know, nursing degree kind of in the—

JONES: [Yes], okay.

WIGGANS: [She was a] CRA [clinical research associate] then into regulatory affairs, but she really wanted to get into sales and marketing. [laughter] She wanted to get in sales and marketing she claimed in the first place because she went to see her brother in Arizona and when she got off the plane there was this banner that said, "Welcome, Serono Sales Meeting"

and she said, "You guys are down in Arizona in the middle of the winter. I want to do that." But as it turns out, she got her MBA, she was a great sales rep for GSK [GlaxoSmithKline] and did a little marketing for them before we had a family. She's very accomplished in her own right.

JONES: [Yes]. So she understands what you're doing.

WIGGANS: Yes, yes, she does. I think she understands it, she appreciates it, she puts up with it. Absolutely.

JONES: So you do have an opportunity to take your time and think—you know, find the right thing and—

WIGGANS: [Yes], and I really didn't have any idea what I wanted to do, I really didn't. Kind of probably defaulting towards, "Well, I'll just do that again," right?

But I'd been so lucky, and I was lucky again because MPM [Capital] was bugging me to join the board at Peplin [Operations Pty. Ltd.] and I didn't really want to, but then they got phase two data that were really good, I thought, really good data, and so I said, "Okay, I'll join the board." But the interesting thing was we had looked at that product at Connetics and the team did all the work on it and they recommended that we license it and I turned it down. I rarely overrule a very strong recommendation, and you can ask people who were there. I said, "No, we're not going to do it," thank God. So it was still available and they asked me to be chairman, chairman for a year. They asked me to be CEO and I was CEO for a year and it was a really, really good product, just a paradigm change for pre-cancer skin conditions. And LEO [Pharma] bought us.

JONES: [Yes]. Did you have the same—how big was the company when you joined?

WIGGANS: It was pretty small. It was started in Australia. So they had re-domiciled to the US but it was still traded on the ASX. So for a year I went to Australia every month or two and I met with investors, went down and visited the company.

It was pretty small. There were probably twenty people here and thirty or forty people there, including twenty people in manufacturing down there.

JONES: [Yes]. So that's a small group to get an FDA approval, yeah?

WIGGANS: Well, we got it through phase two and maybe the first phase three study, I forget. [Yes], it was a good group. We got it through phase two and maybe into phase three. And the investors wanted to sell so we conducted an auction and—

JONES: And you were CEO at that time.

WIGGANS: I was CEO at the time.

JONES: So you knew you could negotiate it.

WIGGANS: Right, right. And LEO came in really at the last moment. We had talked to them about licensing it and they came in at the last minute and said they decided they'd rather buy it than license it and we cut a deal with them. So it was—I think it was a great deal for them. It's approved around the world now so I'm very happy for them.

JONES: Well, tell me a little bit about—MPM wanted you in. I mean, what was the connection there and how did they—they were bugging you to get into it. [laughter]

WIGGANS: I think based on my derm experience they wanted to get me involved with it, so they wanted me to go on the board. I assume—you know, we'd just been through a sale process and they said, "Hey, maybe this is going to go through a sale process some day. That's probably a useful rolodex to have." So I think that's probably why they were looking—

JONES: [Yes]. There weren't any-

WIGGANS: They were looking at exit strategies.

JONES: [Yes]. Were there discussions about that?

WIGGANS: About exiting?

JONES: [Yes].

WIGGANS: Well, a little bit, because one of the things in my contract—which was public in Australia—did not go over well with Australian investors—was that I'd get a \$500,000 bonus if I sold the company within a certain amount of time, which I made a lot more than that on the stock, of course, but [...] I was viewed as the guy who was coming in just to sell the company by the Australian investors.

JONES: [Yes]. **<T: 95 min>** So that's 2009?

WIGGANS: Two-thousand—[yes], so we sold—Connetics closed in the end of December 2006. I think I must've gone on the board [...] of Peplin in 2007, became CEO in 2008, sold it in November of 2009.

JONES: [Yes]. So that's, you know—you're not ready to quit yet.

WIGGANS: No.

JONES: [...] So looking for another opportunity to do what?

WIGGANS: Well, at that time I was seriously thinking about going back to Kansas and running for office.

JONES: Tell me about that.

WIGGANS: So I had been talking to people very informally for a long time about the fact there was—I was going to say encouraged to do so, but probably just people being nice, saying, "Hey, if you want to do that, fine."

JONES: Well, let me ask you this. . . . Maybe we could do a history of your political activity or— [laughter] Because it's going way back in school, right? You were—I have the notes here.

WIGGANS: Well, I mean, [yes].

JONES: The senate, right?

WIGGANS: Student senate, president of the fraternity. I'm not sure that qualifies you to be governor but . . .

JONES: Well, it's a leadership position, right? You're doing stuff and then, you know, doing the trade association, which is . . .

WIGGANS: [Yes], and I must tell you, when I was with the trade association, going back to Washington and doing that stuff, I really liked that. [...]

JONES: What did you like about it?

WIGGANS: Well, it's just you know, that's where the decisions are made, that's where the action is, that's where things happen. [...] So, it was very exciting.

JONES: [Yes]. And who were you talking to when you went back there?

WIGGANS: To Washington?

JONES: To Washington at that time.

WIGGANS: Ted [Edward M.] Kennedy. [...] Henry [A.] Waxman.

JONES: [Yes].

WIGGANS: [Yes], those were the healthcare guys.

JONES: So about the orphan drugs.

WIGGANS: Well, about the orphan drug stuff but just, you know, BIO would have lobbying days and you'd go in and you'd talk about biotech issues, so I got to do that as well.

JONES: But can you recall some of those conversations? I mean, what were you trying [...] to accomplish [...] there? You know, these guys have their constituents, they've got their thing. How did you sort of approach that, and was that a learning experience, figuring out how all that worked?

WIGGANS: [Yes], [...] it is. I mean, you know, on one hand it's the great democracy, right? You go in and say things that you think are hopefully in the best interest of the country, although they're generally in the best interest of you and then the country. But, you know, that part is very exciting. You're trying to do the right thing, and then the other side of it is, you know, you're going in and lobbying for all the special interests, including biotech, right?

JONES: [Yes].

WIGGANS: Tax breaks and R&D credits and things like that that you think are the right thing for the industry but you're lobbying—you're talking about things that are important to the industry.

JONES: [Yes]. Well, I mean, just in practical terms about how to have success at doing that. I mean, there's the old phrase, you know, talk about lawmaking, it's like making sausage, you don't want to know.

WIGGANS: Right. Well, but it is based on the greater good, right? So you think, you know, this—it creates jobs, it expands the economy, the US is a leader in this technology. I mean, all of those things are very true and that's what you try to emphasize and so it was fun. You know, it's an industry that I feel very fortunate to be a part of and we did a lot of good things for patients and everybody else, so it was easy to go in and talk to those guys about what's good about biotechnology.

JONES: [Yes]. It's easy to say the words but then not so easy to convince them, right?

WIGGANS: Well. [yes], I mean, if you're passionate about it you're going in and saying, "I think you should do this because here are the benefits," and—

JONES: Well, if you go in and you're talking to Henry Waxman, you say, "Here are the benefits" and then he says, "[Yes], but . . ."

WIGGANS: [Yes]. Well, I generally recall it usually going—well, very rarely you go in and make all your points and they go, "That's awesome, I'm on board," right? They don't say that very often. They usually tell you what they **<T: 100 min>** don't like about it, but you try to eventually persuade them that the good outweighs the other side.

JONES: And you really enjoyed that process?

WIGGANS: I did.

JONES: So back then-this is the late '80s you're doing this, yeah?

WIGGANS: Right.

JONES: So you're thinking even then that politics is something that you—

WIGGANS: [Yes], I did. [...]

JONES: When did it first cross your mind to seriously, you know, to run for office or to get involved in some way?

WIGGANS: Probably after Connetics was sold; after Connetics was sold and then all of a sudden—

JONES: And then you could afford to do it.

WIGGANS: And then you're just stacking up, "Okay, what do I want to do next?" I mean, then it's really open season. You can say, "What do you want to do next?" And so I started thinking about—at that point, what did I want to do next, which was part of the dilemma with the MPM thing because I remember talking to my wife then after Connetics was sold and said, "You know, I'm thinking about moving back to Kansas and running for office," and she said, "Okay, if you do that I'll support you."

So that was right after Connetics was sold. So then I started talking to MPM and MPM said, "How about this?" And so I kind of was—I was parallel processing for a while.

JONES: [Yes]. And what did you want to do in Kansas? You wanted to go back and ...

WIGGANS: [Yes].

JONES: I mean, you mentioned governor, but was that ...?

WIGGANS: [Yes].

JONES: Initially, was that the . . .

WIGGANS: It was.

JONES: That's a pretty big—

WIGGANS: [Yes]. It's—you know, no city council first for me, right? [Yes]. I originally was thinking about running for the Senate because I just thought, you know, that would have more of an impact on what I was used to doing, national policy and healthcare and things like that, so that's what I was thinking.

And then [...] things kind of sorted out differently. And, you know, I would say I'm a moderate to even slightly conservative and you can be a Democrat in Kansas that way. I couldn't be—I could probably be a Republican here in California but I couldn't be a Republican in Kansas so I ran as a Democrat. And it's a tough place to run as a Democrat for Senator so the race started shaping up differently and the people I was talking to asked me if I'd consider running for governor, so I did.

JONES: [Yes].

WIGGANS: Well, I evaluated it. [Yes], I announced, and I was in the race for a while.

JONES: [Yes]. So did—again, this is a completely different kind of life, campaigning for political office. Did you know what you were getting into or . . . ?

WIGGANS: I thought I [knew], but I didn't. I didn't know. I learned a lot, I learned a lot of what to do. I learned a whole lot of what not to do. I don't think I'll ever do it again but . . .

JONES: [Yes]?

WIGGANS: I've never minded raising money for my companies. I despised raising money for myself. I hated it. [It was] really hard.

JONES: [...] And then—

WIGGANS: You know, I thought you'd walk in and go, "Okay, let's start the policy meetings," and they all said, "No, you go in that room and you start making calls for money."

JONES: [Yes]. Didn't like that?

WIGGANS: [Yes], didn't like that. [...] So that didn't cut my way. I was led to believe that it was a couple of million dollars to run the race and then it quickly became \$10 million to beat Sam [Samuel D.] Brownback. And they were pretty good at really getting way ahead of me on the bad news front, so some of the litigation I'd been involved with, with Connetics and other things, you know, front page right out [of] the gate. [...]

JONES: [Yes], it's a dirty business.

WIGGANS: It is, and I don't blame that part but you know, [...] again, if I would do it over again there's a lot of ways to prepare and I didn't prepare very well.

JONES: [Yes]. But you don't think you'll be doing that . . .

WIGGANS: I just—I cannot foresee such a circumstance at the present time. [...] I became a fan—you know, I've always thought the notion of publicly-financed campaigns as abhorrent until I was in it and I actually think publicly-financed campaigns would be a good idea, because the money that's in politics right now, everybody knows is bad and then when you actually participate in it, it's—

JONES: Worse.

WIGGANS: It's just orders of magnitude worse. Very <T: 105 min>, very bad.

JONES: [Yes]. Well, let me ask you about—well, let's talk about Demira [Inc.].

WIGGANS: [Yes].

JONES: And so you tried to—this is coming out of this, then?

WIGGANS: [Yes]. So, you know, I lasted a couple of months in the race before I blew up, and so now I'm back here in California trying to figure out what to do next.

JONES: And you have lots of opportunities, I assume.

WIGGANS: [Yes]. You know, it wasn't very long. I was just kind of thinking about, "What do I do next?" And before I could think about it very much, Fred Craves called and said, "Hey, you want to come in and just hang around Bay City [Capital] and look for opportunities?"

JONES: That sounded pretty good.

WIGGANS: [Yes]. It sounded like something to do.

JONES: So you then saw some deals coming through, right, that you could—how many came through before . . . ?

WIGGANS: Before we picked the first one?

JONES: [Yes].

WIGGANS: Over a hundred. [laughter] It was . . .

JONES: [Yes].

WIGGANS: Gene Bauer and I were up there in a conference room just looking at deals and processing stuff and, you know, seeing what we wanted to do, and the first deal we did we had both looked at independently, just in other lives, because, you know, people would call us and bounce ideas off of us and so this opportunity had been bounced off both of us and we both passed on it, and then one of our advisors that I have a lot of confidence in from Connetics days called me one day and said, "You know, I know you took a look at this. I would advise you take another look at it." So we went back, looked at it, liked the science decided that was the first thing we were going to do, and Bay City and NEA [New Enterprise Associates] and got behind it and that's how it started.

JONES: [Yes], so what did you do? Did you know what your role was going to be or did you have an idea that you wanted to . . . ?

WIGGANS: [Yes]. I think our mission—Gene and I did agree strongly that—and this is our stated mission—we think dermatology has been underserved.

JONES: Were all these deals you were looking at in dermatology?

WIGGANS: [Yes], that's what we were going to focus on, dermatology, and it had to be unique. There was no more run-of-the-mill reformulation stuff.

JONES: You're looking for another new delivery or something.

WIGGANS: Well, actually, we were looking for new molecules. We were looking for new molecules. We said, you know, it's earlier and it's riskier but there hasn't been anything new in dermatology in a long time and patients deserve better than that, so that was the mission.

And we found this stuff and we found a program that was an old Connetics program that GSK had—you know, the company that bought Connetics got sold to GSK. GSK had kind of put this on the shelf. We got that back and then we got the UCB [Union Chimique Belge] deal and then, [...] it came together a lot quicker than we would've thought.

JONES: [Yes]. Well, tell me—the deal came to you and what was there? Just the science, just the—

WIGGANS: There were three preclinical assets: two products for acne and an antiinflammatory product, and [...] we liked the science. We thought—it was work that was done at QLT [Inc.]. It was medicinal chemistry, it was very well done; we liked the data. You just don't see a lot of good stuff in dermatology that we thought was very interesting, very innovative.

JONES: [Yes].

WIGGANS: We liked it and so we got it.

JONES: And were you ready to be an operational company officer again?

WIGGANS: [Yes]. Well, I thought it might be a little different to start with. I thought it would be—there was a real scarcity of good dermatology products, and so I think both of us kind of started out thinking we would do ourselves and dermatologists and their patients a favor by getting something to proof of concept, and if it works we could sell it and everybody wins.

But I think the void in the market, the opportunity, the people we've been able to hire, I think, has kind of inspired us [to] go big again. Bigger than ever. Why not?

JONES: [Yes]. So this is five years down the road now.

WIGGANS: This was five years—it'll be five years this August when we close the Series A.

JONES: [Yes]. And you've got—I'm looking at **<T: 110 min>** four molecules and you got one in phase three? Oh, but that's—

WIGGANS: Cimzia.

JONES: [Yes].

WIGGANS: [Yes]. Cimzia is in phase three and we have one in phase two and we have one that we believe will be in phase three the second half of this year. So that's the goal this year; two phase three, one phase two.

JONES: [Yes]. So, so far so good, huh?

WIGGANS: [Yes].

JONES: How big is the company?

WIGGANS: Forty-five people.

JONES: [Yes]. So you're having fun?

WIGGANS: I am. I'm having—how many people have you talked to that said they wished they'd done something else?

JONES: [Yes], I can't think of any but-yeah, no. There's something about it, right?

WIGGANS: There is, there is. There's something about working in this business that you really help people and everybody you're working with is doing it to help people, so I'm sure there's somebody out there but out of 180 people, so far you haven't found anybody that said, "I wish I'd had a different career."

JONES: [Yes]. I don't think so. I don't think anybody's said that.

WIGGANS: [Yes]. So, I consider myself very lucky at the outset to be doing this, and then I was able to, you know, point out a couple of things that just were pure luck. That guy called me at Lilly—I mean, and he only called me because the guy he called turned the job down because he didn't want to move to Boston. Just, you know, very, very fortunate. Even here. I mean, Gene and I both passed on the first deal and Dr. Webster called us independently and said, "If I were you guys I'd take another look at it."

JONES: [Yes]. Well that's also—you know, in all the stories that we hear it's always elements of luck. That's just the nature of it.

WIGGANS: It is, yeah, yeah.

JONES: And we interviewed people who have been successful. [laughter] You know, people who haven't been—and there are lots of those people, you know? I mean, we haven't talked to them, so I don't know

WIGGANS: [laughter] Well, maybe so, maybe so. That would be interesting, what they would say, whether they'd—

JONES: I mean, it's great if—you know, but everybody goes through it, has these . . .

WIGGANS: [Yes].

JONES: It's not easy. And it's a really typical stor— oh, that didn't work so we had to scramble and find something that would, right? And that's another common theme.

WIGGANS: Have you interviewed very many people that said, "I seriously thought about giving up?"

JONES: No, because we're talking to the people who were—they're going to stick it out no matter what. [laughter]

WIGGANS: Which at a certain point becomes—could become a fool's errand, right? "I've got to do it, no matter what."

JONES: [Yes]. Well, no, that's it then—but see, there's the element of luck. It is a fool's errand, or it could be a fool's errand and at the end, if you see it through, right—but we're talking to people who saw it through to success so . . .

WIGGANS: [Yes].

JONES: It's an interesting sample that we ...

WIGGANS: [Yes], it is. I was thinking about, you know, probably the darkest point was after the Relaxin failure and, looking back on it, if somebody would've said, "Hey, you want to go get into the consumer electronics business?" I don't know what I would've done.

JONES: [Yes]. But that wasn't—you had two products.

WIGGANS: We did.

JONES: You know, it wasn't the end of that company.

WIGGANS: [Yes], that's true. That is very true. Always good to have a backup plan. [...]

JONES: [Yes]. I want to ask you about the Biotechnology Institute.⁸ You've gotten involved in that and—

WIGGANS: [Yes].

JONES: —the education piece and you're involved in the BioGENEius program.⁹ So, tell me about that interest.

WIGGANS: Well, I've been on that board for a long time, and I haven't been to the BIO meeting for two years, I think. But, man, every time you look at those kids and what they're doing, it is unbelievable. And to see the experiments they're running and the competitions that they go through, you know, that's a pretty big deal now. These top students are doing all kinds of science competitions, but to see what they're doing and how they're thinking, and knowing what impact they can have on the future of science is unbelievable. So it's very exciting.

JONES: [Yes]. They had to start somewhere, right? [...] What made you think that **<T: 115 min>**, you know, it could ...

⁸ Funded by BIO in 1998, the Biotechnology Institute is a 501(c)3 educational foundation.

⁹ BioGENEius Challenges are competitions for high school science students.

WIGGANS: I think I got tagged with it because it was a local program, as I recall. It might've been a Pennsylvania program that we thought, "Let's try to take this national," and so we talked them into letting I think that's how the Biotech Institute started, as I recall. "Let's take this program, let's go national, we'll start this thing called the Biotech Institute and we'll be able to reach more kids." And so they said, "Oh, that's a great idea. Why don't you be the chairman?"

So that's how I got—I didn't get stuck with it. I mean, it's been very rewarding. Ups and downs in terms of fundraising but just—again, it's a gratifying part of the business because any CEO or company you talk to about science education, they will listen and become engaged. So it is a very common bond that we have. [Yes].

JONES: [Yes]. Well, it's interesting to me because we're working with education, too, trying to get something going. You know, we've got things in the works but it's a crowded space.

WIGGANS: It is a crowded space, [yes], and I think that's a really good point because I think what we've been looking to do is, is there a way to combine programs to get critical mass? Because there are a lot of programs that are really good that are frankly under-resourced, and to bring things together, that's a great idea.

I'd be happy to talk to you further about that. [...] Looking for homes that could be homes for a couple of programs, because the infrastructure's there on the Institute and it works great, but it's got to go to the next level somehow.

JONES: So—okay. I will have Heather [Erickson], our CEO, and Ian [Signer], our director of education—should I have them call you?

WIGGANS: Absolutely. Have them call me and, you know, just compare notes on this. You know, because we've had discussions about other things to combine them with, how can you step up the visibility and even have more of an impact, and always looking for opportunities to do that. Yes, I would be happy to talk to them and I would be greatly appreciative of you arranging it.

JONES: Sure. Okay, very good. Tom, is there anything else we should know about your career?

WIGGANS: I'm trying to think if there's anything else that we didn't cover. I feel so fortunate. I feel there's been so much good fortune. I was thinking over the weekend, what should we

include and, you know, things like the coincidence of my first day at Lilly being such an important day, this biotech assessment at Serono. Boy, if I had that notebook it would be great.

JONES: Well, that would be a real . . . [laughter]

WIGGANS: [Yes]. It would probably look so rudimentary. It would just—but what a document that was. I mean, that was early days. [...] I think we had Biogen come in. We had—I mean, we had everybody come in and pitch us.

JONES: [Yes].

WIGGANS: I consider myself very fortunate. I bet most of the people you've talked to do, as well.

JONES: [Yes]. Certainly, it's a great field. If you think of any other stories along the way, you know, we can add them in. Let me know, you know, if something occurs to you.

WIGGANS: Yes, I will—I will see. You did a good job of covering everything.

JONES: [Yes], I think—well, we do a fair amount of research ahead of time.

WIGGANS: Yes, yes, you did. [Yes], thank you. All right. Terrific, terrific. It was great meeting you and it was really fun to recollect and thank you for being so patient with me.

JONES: [Yes], good. Okay, well this will end up—you know, we'll get the transcript and then we'll get it back to you and with your permission we'll publish it in our digital archive. [...]

[END OF AUDIO, FILE 1.1]

[END OF INTERVIEW]