

SCIENCE HISTORY INSTITUTE

GABRIEL SCHMERGEL

Life Sciences Foundation

Transcript of an Interview
Conducted by

Arnold Thackray, Cassandra Stokes, and Mark Jones

at

Boston, Massachusetts and via phone

on

15 December 2011 and 18 September 2012

(With Subsequent Corrections and Additions)

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GABRIEL SCHMERGEL

1940 Born in Budapest, Hungary, on 14 May

Education

1962 BS, Rensselaer Polytechnic Institute, Mechanical Engineering
1967 MBA, Harvard Business School

Professional Experience

Baxter Healthcare Corporation
1967-1969 Assistant to the President – International Division
1970-1971 General Manager, Germany
1972-1973 General Manager, Belgium & Germany
1973-1975 Area Director for Latin America, based in Deerfield, Illinois
1975-1980 Vice President of Europe, based in Brussels

Genetics Institute, Inc.
1981-1997 President & CEO

Honors

1994 National Academy of Engineering
1998 Honorary Doctorate of Engineering, Worcester Polytechnic Institute
2003 Golden Door Award, International Institute of Boston

ABSTRACT

Gabriel Schmergel was born in 1940 in Budapest, Hungary. He immigrated to the United States at the age of sixteen shortly after the Soviet Union defeated the Hungarian Revolution of 1956. His parents worked manual labor jobs to support the family, and Schmergel himself had to work as a bottle boy in a supermarket after school and on Saturdays. In 1962, he received his Bachelor of Science degree in Mechanical Engineering from Rensselaer Polytechnic Institute. Subsequently, he served with the US Army as a lieutenant, stationed in Germany. He earned a Master of Business Administration degree from Harvard Business School in 1967, where he was named a Baker Scholar. Upon graduation he joined Baxter Healthcare Corporation and throughout the next fourteen years he held various international line management positions, completing his Baxter career as president of the International Division.

In early 1981, Schmergel became president and CEO of a start-up, Genetics Institute, Inc. (GI), which had only five employees at the time. Under his leadership, the company became a fully integrated biopharmaceutical company with a portfolio of drugs for hemophilia, anemia, and bone growth. He talks about working with Mark Ptashne, Tom Maniatis, and members of the GI board as well as the patent lawsuits against Amgen in the United States, Japan, and Europe and dealing with losing the patent case in the US. After sixteen years of independent existence, Genetics Institute, Inc., which by that time had twelve hundred employees and sales of 270 million dollars and was one of the few profitable biotech companies, was acquired by American Home Products (renamed Wyeth and later purchased by Pfizer). After the acquisition, Schmergel retired as president and CEO in January 1997. He spent his time in retirement serving on boards, including the Boston Ballet Board for five years, and spending time with family.

INTERVIEWER

Arnold Thackray founded the Chemical Heritage Foundation and served the organization as president for 25 years. Thackray received MA and PhD degrees in history of science from Cambridge University. He has held appointments at Cambridge, Oxford University, and Harvard University, the Institute for Advanced Study, the Center for Advanced Study in the Behavioral Sciences, and the Hebrew University of Jerusalem. In 1983 Thackray received the Dexter Award from the American Chemical Society for outstanding contributions to the history of chemistry. He served for more than a quarter century on the faculty of the University of Pennsylvania, where he was the founding chairman of the Department of History and Sociology of Science and is currently the Joseph Priestley Professor Emeritus.

Cassandra Stokes assisted in conducting this oral history interview, but no additional information about their career history is on file.

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

ABOUT THIS TRANSCRIPT

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

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INTERVIEWEE: Gabriel Schmergel

INTERVIEWER: Arnold Thackray
Cassandra Stokes

LOCATION: Boston, Massachusetts

DATE: 15 December 2011

[. . .]

THACKRAY: This is an oral history interview with Gabe [Gabriel] Schmergel on the fifteenth of December 2011. The interviewers are Arnold Thackray and Cassandra Stokes. Gabe, can you begin at the beginning by telling us something about the family into which you were born?

SCHMERGEL: Sure. Sure. I was born in 1940 in Budapest, Hungary. My father [Geza Schmergel] was an entrepreneur, businessman in the construction business. During World War II, he spent some time in the Hungarian army at the time when they started to draft middle-aged men. During that time, of course, his business essentially evaporated—or more or less evaporated. However, after the destruction of the Second World War, the Russians and the Germans and the Hungarian army, which was, of course, unfortunately allied with Germany—right?—the capital city was totally devastated. Few people realize how bad it was—almost as bad as Stalingrad, [Soviet Union, now Volgograd, Russia]. So if you were in the construction business, as soon as things became stable, if you were in the construction business, you had plenty of work. Unfortunately, in 1948, his firm was nationalized as the communist government consolidated its control, and they started to nationalize. At first the really huge national firms and then the medium-sized firms, which he fell in that group. I remember he came home once and said, “Well it’s all gone. You know, they took everything.”

He sat at home for three months unemployed, and then they called him back, because they couldn’t run the company without him. They had consolidated his company with two others that they nationalized—competitors—and they ended up calling back the former owners into positions which would be the equivalents of vice presidents of administration, vice presidents of technology, or whatever. Actually, one of my father’s former workers, [who] was a Communist Party member, was named the CEO. Since my dad always treated his people well, it actually wasn’t all that bad [for him]. Now in 1956 . . . so between 1948 and 1956, Hungary was under a very strict communist regime, as you know, being a historian yourself, and the Hungarian communists tried to “out-Stalin” Stalin. They tried to prove to Stalin that they are tougher and meaner and more destructive than even Stalin was in the Soviet Union.

But in 1956, things blew up, and there was an opportunity to leave. Our family then left the country. I was a high school junior. I had just started my junior year in high school. My brother [George Schmergel], who was four years younger than I, and my sister [Eva Schmergel], and obviously, our parents. My dad organized a small group, and we went through the classical escape through Austria, which, in itself, could be a story of several hours. I won't go into that now. We—

THACKRAY: How . . . that was all pretty sudden, wasn't it? The Hungarian uprising, and the . . . I mean . . .

SCHMERGEL: Yes.

THACKRAY: It was like something blowing up, rather than . . .

SCHMERGEL: Yes. Yeah, it was.

THACKRAY: So your father and mother were having to respond pretty quickly to it?

SCHMERGEL: Oh, yes. Yes. [. . .] It came very suddenly. It was not predicted. The communists were very confident—when it first started, they were very confident they could control it. But it got out of hand. Initially, the occupying Russian troops, many, many tens of thousands . . . I've got a number of books on the subject, <T: 05 min> including the memoirs of some of the Soviet generals who were in charge. Initially, they did not react as brutally as later. The Politburo—whose documents have now also been put in the public domain, and all that is now available to historians—the Politburo was debating what to do: should they crush it immediately? Should they reach a compromise? After several days of deliberations, [Nikita Sergeevich] Khrushchev opted for crushing the revolution. They had to pull out most of the troops that were occupying Hungary because those people had been there for a long time, and they had become, let's say, sympathetic to the population. They were unwilling in many cases to slaughter just civilians. They pulled most of those troops out and brought fresh troops in who were told that they are fighting the American capitalists and all that. Most of those troops had no idea where they were. They came in with absolute brutality. All resistance was crushed. Very often they did not take prisoners. If people—the freedom fighters—gave up . . . very often, they could come out of the building, they would be shot right then and there. It was quite brutal.

When the communists then with help of the Russian troops and the Hungarian secret police reestablished control, there was a period of maybe six or eight weeks, there was utter chaos in the country. A general strike was going on. Nothing functioned. During that chaos, it was possible to escape. Two hundred thousand Hungarians left, and we were among them. We

spent about two months in Austria. Actually, it was a very instructive experience. Part of that we were actually in a refugee camp, which actually kind of reminds me, when I [see] in the news all the time, whether it's the Palestinians or [wherever], you, sort of, have a certain amount of sympathy for what goes on, whether Darfur, [Sudan] or wherever you are. Then my father's cousin [Paul Schmergel], who lived in the [United] States, had sent some money to my father, which allowed us to move into a one-room hotel—all five of us—sleeping on the floor. We got some extra mattresses from management while our paperwork was processed. We had applied for immigration to the US and to Australia, and we were actually accepted to both, but obviously, the right choice was to come here, and—

THACKRAY: What was the sort of visas at that moment for Hungarian refugees?

SCHMERGEL: Yes, there was an extra . . . so President [Dwight D.] Eisenhower—maybe that's why I'm a Republican—Eisenhower [. . .] pushed through in Congress an emergency bill.¹ Forty thousand Hungarians were admitted, subject only to screening. They wanted to screen out communist spies. But it was a very quick acceptance. Essentially, after eight weeks or so, we were on a military transport plane from Frankfurt, [Germany], to the States. We spent only a day or two in the military base [Camp Kilmer] in New Jersey, which was [used as] a receiving point. Then my father's cousin picked us up and took us to his home. That was the first time I saw a Cadillac. He came down. He had a big Cadillac. He was also a successful businessman. So we all piled into his Cadillac. We came to a very nice home. We stayed there for a while until my parents got some work. I was a high school junior. I did not speak any English.

THACKRAY: I was wondering. Yes.

SCHMERGEL: I didn't speak any English. I spoke some German, studied German in Hungary, which was usually the <T: 10 min> [second] language of the upper middle class—the Hungarian upper middle class [before the Soviet occupation] . . . professional people, I just say, would always give themselves, and it goes back to the Austrian-Hungarian Empire where you had to speak German if you wanted to amount to anything, whether in a government position or business. So I spoke German, but not English. I just started to take English lessons. I was put into high school in Port Washington, [New York].

THACKRAY: Port Washington?

¹ Congress passed the Hungarian Escape Act of 1958, which granted refugee status to Hungarians. Nearly forty thousand Hungarians were allowed to enter the United States temporarily. See Jane Guskin and David Wilson, *The Politics of Immigration: Questions and Answers*, 2nd ed. (New York: Monthly Review Press, 2017).

SCHMERGEL: New York. Long Island, Port Washington, where my parents rented a small apartment, sublease, kind of, a thing. They both went to work doing manual labor.

THACKRAY: Because there was no money whatsoever?

SCHMERGEL: Zero money. Yeah. We had to leave everything in Hungary. Of course, by 1956, we had very little.

THACKRAY: There wasn't much to leave.

SCHMERGEL: Right. There wasn't much to leave. We just had to leave everything there. When . . . basically we just took a little carry-on kind of a handbag when we went through the escape—extra change of underwear, shirts, couple of things.

THACKRAY: How old were your parents in 1956?

SCHMERGEL: My father was fifty-two, and my mom [Elizabeth (Kovacs) Schmergel] was six years younger. Yes.

THACKRAY: [Yes]. And they found themselves doing manual labor?

SCHMERGEL: Manual labor. Yes. [. . .]. That was also sort of a big change. Even under the communist regime, my father, being in a government-owned, a state-owned company, he was still . . . let's call a vice president of administration. Then going to the manual labor. He pretty much did that until he retired. He could not establish himself in the construction business here because he was too old to get going and didn't have the capital. He ultimately had a very small company actually doing painting, house painting. From time to time, when I needed extra money when I was in college, I would work for him. I appreciate how hard it is to spend a couple of weeks painting. Your arms are falling off. It's very, very hard if you do that all the time. My mom went to work in . . . we lived in Port Washington. My mom went to work in New York City, [New York], in the garment district doing piecework. It was a sort of new experience for her, but we needed the money.

THACKRAY: Was your sister older or younger than you?

SCHMERGEL: Two years younger, and my brother, four years younger.

THACKRAY: Okay. So you're the hope of the family. [laughter]

SCHMERGEL: Well, yeah, I guess. Yes. Yes, of course, in Eastern European families, and I'm still being reminded by my sister and my brother, who recently passed away due to an illness, that in Eastern European families, the firstborn male is the prince. Everything revolves around the firstborn male. And it's an interesting psychological study because my sister, who has done very well and got her PhD and all that, and happily married, she still reminds me of what she calls unequal treatment. [laughter] And so I finished high school, and it was also very interesting. The one thing that the communists did not destroy in Hungary was the K-1 through K-12 education system, which was modeled on the German—again, looking at the historic—German education at that level is superb, and then they break it up. Some people are oriented to become apprentices, and some people are oriented to an academic career. So the Hungarian <T: 15 min> system was excellent before the war, stayed excellent even under the communism. I came here, I didn't speak English, but . . .

THACKRAY: But you knew more than the rest of—

SCHMERGEL: I knew more, except English literature or whatever, but math, chemistry, physics, I didn't need to speak English. I would have As and then Fs. But as I quickly learned English just from osmosis, I was able to catch up and get decent grades. I was accepted—at that time, I wanted to be an engineer—I was accepted to RPI [Rensselaer Polytechnic Institute] and MIT [Massachusetts Institute of Technology]. RPI gave me a scholarship. MIT did not. So I ended up going to RPI and got a bachelor of science in mechanical engineering (BSME) in 1962.

THACKRAY: You were living on the campus, doing that?

SCHMERGEL: I was, yes. RPI is in Troy, New York. I graduated from high school in '58, right? I was born in 1940. I was eighteen on schedule. Then four years of college at RPI.

THACKRAY: What about the emotional and practical experience that living under that repressive communist regime with your parents, downwardly mobile, going through a total explosion, ending up literally in a new world? What your emotional, psychological, intellectual reaction to all of that?

SCHMERGEL: Right. Obviously, it was extremely difficult. Okay? I, kind of, look back, and I also interacted and have friends . . . a number of people had the same kind of experiences as I do, coming from places like Hungary or Romania or whatever. We all feel that in one sense we lose five years. So in our overall career development or whatever, you lost five years when we came as teenagers or people in their early twenties. It takes about five years to adjust. Now that is for many people made up, however, by an extra determination to succeed no matter what, right? That's the mirror image of that: that many people—not everybody—because you pay a tremendous price for that no matter what—I have to succeed kind of an attitude.

My wife, for example, claims that I didn't lose five years because she says, "You made it up." But it's very hard, and it's very hard to come. For example, in Hungary—not that I am a great athlete or a great scholar and all that—I was, sort of, like the leader of the class, of my class in school and all that. And as you come here, you are a nobody? And people are very nice to you. Everybody was very nice to Hungarians at the time because it was a very popular thing, the uprising and all. People are very nice to you and all. But at the end of the day, you know that you are a nobody. You have no money. You have no money. You don't have a car. In those days, all the guys had short hair, this and all that. You come and everybody is well-dressed, and you have the rock and roll, the parties, and you're just totally out of it socially. It's very easy to withdraw.

Of course, I had to work every day after high school. [. . .] From high school, I walked to the local supermarket—the Grand Union supermarket—which I believe is no longer in business. Last time I visited Port Washington, where we lived, it wasn't there. I was the bottle boy. They were returning bottles <**T: 20 min**> for a refund, and the only job they would give me where you didn't have to speak English and you didn't have to interact with people is you collect the bottles, and you give them whatever—penny for small ones and five cents or whatever for the large bottle. I did that every day after work and Saturdays. It was, kind of, a tough time. All immigrants go through that. [. . .] It's sink or swim, which is where I also adopted my philosophy for my organizations where we'll help you, we'll be nice and all that, but you've got to sink or swim, you know? I think you heard, for example, Tuan [Ha-Ngoc] saying I—at the reunion, right?—gave him some impossible jobs, and of course, he's a very, very good person. I said, "Look, you get this thing done, and don't come back until you have done it." Tuan, again, an immigrant, responded well to that kind of leadership.

So, again, I got some of these anecdotes and war stories that may or may not belong to there. After getting my MBA . . . so I'm jumping a little bit ahead, I got a job at Baxter Healthcare Corporation. It was called Baxter-Travenol at the time. I was hired as assistant to the president of the international division. He gave me an assignment actually in the Mideast; it was a project. I packed clothing. One suitcase for a one week stay. I get there, and I realize it's going to take a lot longer. I called him. Eventually, I come back or whatever. My boss's name was Charlie Schwarz. Charlie said, "Come back when you are done." I said, "Yes, sir." I came back six weeks later. I was married at the time. I just stayed there. Charlie said, "Come back when you are finished." It took me six weeks, you know. I just stayed there. I did get to do a lot of sightseeing during the downtime there when our business meetings and all that. I did get to see. Met some nice people. Did a lot of sightseeing in between the very tough negotiations.

Okay. So now jumping back, so I got a mechanical engineering degree at RPI. I began to realize, however, that engineering was not really my strong forte. I began to realize that I'm not going to be an outstanding engineer. I will probably just be a common, average engineer. Probably the most useful experience I had in college, actually, was having joined the ROTC [Reserve Officers' Training Corps]. That was, kind of, a big step for me because I still had a terrible accent, much worse than what I have today. I was, kind of, shy about joining the ROTC because of the accent. But I was encouraged to do that, and I think it was a great decision, because I was commissioned then as a second lieutenant. I chose—because of the mechanical engineering degree—the Ordnance Corps. A few months after graduation—I did take a short-term job after graduating from college, just to earn a little bit of money. You could ask for a few months of delayed deployment. It was still peacetime, so there was a great deal of flexibility at that time. Vietnam hadn't really gotten started yet. Because of my German language skills, I also requested to be sent to Germany, and again, this was a very good decision. I was assigned as a platoon leader, and that was an unbelievably great experience for me, because at the age of basically just turned twenty-three, I was put in charge of a whole bunch of people, <T: 25 min> experienced sergeants, who were Korean War veterans. A lot of young kids who were the enlisted men, the soldiers coming from West Virginia, Oklahoma, the inner cities. A very good mixture. I had one college graduate in my platoon. [laughter]

THACKRAY: A platoon is how many people?

SCHMERGEL: A platoon—well, it depends. I think most of the time I had about thirty. You know, we weren't always at full strength and all. The . . . tremendous experience of interacting then with people of all sorts. My company commander for the full two years was an outstanding African American officer who I got along [with] extremely well with him. I learned an awful lot from him. It was for me just an outstanding experience. Thank God, there was no war going on. I could go through that learning curve under peacetime conditions.

THACKRAY: And this was in Germany?

SCHMERGEL: In Germany. Yes. [. . .] So at that time, I also realized that my talents lie . . . you know, I can reconfirm my previous feeling that I'm not an outstanding engineer as such, and I decided to go into business, but of course, I knew nothing about business. No accounting, nothing, right? So—

THACKRAY: But, you know, your father did that.

SCHMERGEL: My father did that. Yeah. Right. Yes. Yes. Yes. I mean, there was that family gene or whatever you want to call it.

THACKRAY: That's an extraordinary seven-year transition from high school student in communist world to American [Army Officer] in Germany.

SCHMERGEL: Right. [. . .] So I became aware that there is such a thing as a business school in America. So basically, I set about to find out what are the better or the best business schools, and Harvard [University] and Stanford [University] were at that time on the top of the heap. From Germany, I applied both to Harvard and Stanford, and as a fallback, to Purdue [University]. I figured, if I don't get into the top schools, I need to have a fallback. I was accepted to all three and chose Harvard. Now to some extent, it's interesting because it's a little anecdote. I got my discharge in Europe in May of 1965. I served my two-year ROTC obligation. My wife and I decided to spend the whole summer camping. Our only way . . . there were no cell phones or anything in those days, no email. The only way to keep in touch was to go to the American Express office wherever, and the acceptance . . . we told the business schools to send the letters of acceptance to my father-in-law's address. My father-in-law also lived in Port Washington, and so as we are traveling, and in Spain, we go . . . I think it was in [Madrid, Spain] to the American Express office, and there's a letter from my father-in-law saying that the acceptances from all three schools came in. He sent back to Harvard Business School accepting for me, signed my name, and sent in whatever deposit they wanted. [laughter] Then he said, "Go out and have a great dinner on me. Just let me know how much it costs. He had he sent back Stanford, I might have ended up at Stanford, but I ended up at Harvard. So yes, go on?"

THACKRAY: To wind the tape back a moment, you've [married] somewhere in here.

SCHMERGEL: Well, yes. All right. Okay. So we'll come back to that. Thank you <T: 30 min> for that. When I was at RPI, I was part of the scene there, more or less, gradually, as I kind of got accustomed to the customs. You can probably relate to that, in college, and all that, the parties. But then I told you I had I accepted a job after college. I asked for delayed deployment into the military. I wanted to earn some money, and I actually went home to live with my parents in their small apartment because this was another good way to save some money, and they were happy to see me. Coming back to Port Washington, of course, I didn't really know anybody. I asked my sister, I said, "Look, Eva, will you," I said, "find me some dates among your friends or their sisters or whatever." You know, blind dates. My sister, being a dutiful, good sister, listening to her older brother, well, she did that. My sister knew my wife's older sister. They were in the same class. That's two years younger than me. They arranged that I meet Valerie, whom you might meet later. She's running errands. We have a lot of things to do before we head back to Florida. There was a blind date arranged. Then she was actually at that time [seventeen] years old. I was twenty-three. We saw each other obviously as much as we could. Then I was . . . when I received my assignment to Germany . . . actually, when I met my

wife, she was still only seventeen. I'm sorry. She was seventeen when I met her. She wasn't even eighteen.

I was assigned to Germany. We had a decision to make. And, you know, and the decision was obviously, let's get married. Her parents were not all that happy about that, right? Her father was a financial analyst working on Wall Street. A well-established person, one of the early chartered financial analysts. Who is this guy, you know? Being a second lieutenant in the [United States] Army and having a, you know, nice uniform didn't mean too much to him. He said, "What's this?" Of course, she was only eighteen. But we, sort of, basically said, "Look we'll get married with your help and permission." She was eighteen, the age of consent in New York State. I said, "You know, we'll get married one way or another. You can either help or not because we are on our way to Germany." [laughter] So under some pressure, they agreed, and I'll actually show the [wedding] picture because we have this here. They quickly organized a wedding.

THACKRAY: Oh, boy. [laughter] Lovely.

SCHMERGEL: Yeah.

THACKRAY: Yeah. Was your wife's family an immigrant family or settled—

SCHMERGEL: No. [. . .] Settled. Settled. I think going way back, it's German and Swedish, kind of, background, going way back. We haven't spent too much time [on this issue] yet. But one of these days we will study the genealogy and all that. You know, it's more and more information is available on these websites. But—

THACKRAY: New York and Port Washington was the center of the universe?

SCHMERGEL: Right. [. . .] I went to Germany alone initially, and then later, she followed a bit later. I found a small apartment off-base on what's called "on-the-economy." Rules and regulations in the military have traditionally, historically changed. At <T: 35 min> that time, officers were allowed to have their families there if you bring them on your own. Enlisted men were not allowed to have families there. Some of them got themselves temporary wives or whatever. Most of the military was male, you know. It's not like today where there is a much better balance. When I say men, in reality, I didn't have any female [soldiers]—hardly ever saw any female soldiers in those days. So she came over, financed by her father with a one-way ticket. The only thing she could do was get a job as a secretary. She worked as a secretary for the [United States] Air Force there, and then she also worked for GE's [General Electric Company] . . . GE had some, kind of, a local office there for a while. So while I was doing my

military duties, which in some ways because it was peacetime was like a job, she worked. We just lived very modestly, but we had a great time. That was certainly a really great two years. So now jumping ahead, and we came to Boston, [Massachusetts], in 1965. Again, we just rented a small apartment. She continued to work as a secretary and started to take evening college classes at BC [Boston College]. I will say that she ended up graduating about twenty years later, when we moved to Boston more permanently, in 1980, because with part-time evening classes, you never get enough credits.

I, kind of, was—and I am, kind of, just going to state it as a fact—one of the better students at the Harvard Business School was called the Baker Scholar, which is the top 5 percent. So clearly, I found my niche in life, because it all came to me very, very naturally. I mean, I had to work hard and study hard, but it did come to me very naturally like science came very naturally to Mark Ptashne or Tom Maniatis or a lot of other people. That stuff came to me very naturally. While at the business school in my second year—in the second half of the second year—you start to interview. I went through all the interviewing process. I had job offers from, you know, Dow Chemical [Company], WR Grace [and Company], and all. But the job offer—I had about five or six job offers—the job offer that impressed me the most was from Baxter Healthcare Corporation. As I said, Baxter in those days it was called Baxter-Travenol, but they changed their name. Travenol is—I don't know—a useless name, which they finally realized. The CEO . . . at that time, Baxter had sales of seventy million dollars, so it was not a big company—a couple thousand employees. The CEO was Bill [William B.] Graham, one of the giants of American business, an incredible person, incredible leader. And again, incredible intellect. He personally came to interview at the business school. He wasn't sending third-level people. He came personally to interview. He at that time decided, as a few other companies did—but only very few—to recruit what he viewed as top MBA students from the top schools and bring them in as assistants to top executives, people who were running divisions or major staff functions. A sink or swim philosophy. <T: 40 min> And after a year or two, then either you got a line job—a big job—for a young person, or you would be encouraged to look somewhere else. You would be tested on project work, your willingness to do whatever it takes, and what's your intellectual ability. You were tested. I was offered a job as assistant to the head of—what was called at that time?—the international division, which was a ten-million-dollar business, and a couple of factories outside the US, some export sales. This president of that group was called Charlies Schwartz, a really good guy, a German background, but obviously American. I'm doing that job, project work for him. It allowed me to travel all over the world. Big, big challenge for the twenty-seven-year-old, just newly baked MBA.

THACKRAY: Was this a no-brainer to take that job, not Dow, say, or—

SCHMERGEL: Yeah, you are right. It was a no-brainer. I was very attracted to the fact that healthcare was going through changes then. All of a sudden, more money was being spent. Technology improvements were more and more accepted. There was a lot of growth in that business. I felt that having an international background would be a plus there as opposed to let's say in your standard Midwestern firm like Dow might very well be a minus. I think all this has

changed now, but in those days, this was the mid-sixties. It was a different world still. Different world for foreigners, a different world for women. Baxter at that time had no senior female executives, no African American executives. It was basically all white Caucasians. I mean, that was the situation. There were all kinds of ceilings around. But Graham with his MBA orientation actually hired a number of other MBAs too from other countries, European countries. One day Charlie Schwartz, who was my boss, came to me and said . . . I wasn't totally unprepared for that. He said that Germany, which was a huge market for the company, huge potential market also, sales company with maybe twenty-five salesmen, warehouse, distribution, no manufacturing, and the German operation wasn't doing well. Charlie Schwartz, "Gabe, you have done some work looking at analyzing it from a distance. Are you interested to go to Germany and become general manager?" I said, "Sure."

He said—this how Baxter operated—"Okay get on a plane tomorrow." He said, "I have to go to Japan, but we want to get this done quickly." He said, "Let's draft a letter where I'm authorizing you to terminate our general manager." He was a German guy, Herr Doctor ['S']. I will never forget him. [Former] German army doctor who actually lost an arm in the war, and he was running the German operation like his kingdom, but he wasn't meeting his budgets and all. [Charlie Schwartz] said, "I'm giving you a letter authorizing you to relieve him of his position, authorizing you to negotiate his termination within guidelines." He said, "Go and see the company lawyer, find out what the parameters are. And, you know, take over the operation." He said, "I'll be in Japan if you need me." [laughter]

So I come home, I tell Valerie, "Okay, we're going to Germany. München, [Germany]. It's a garden spot. A great place. Okay?" And of course, we had lived before in Germany, in Wiesbaden, [Germany]. We knew München. We were all excited. I get on a plane. I show up in the office. <T: 45 min> We had a six-month-old child at the time. Our oldest was six months old. We move into a hotel in München. The next morning, I show up in the office. Dr. [S] knew me before as a staff guy, right? You know, kind of, "Who are you? A staff guy? You're going to bother me about some study you are doing?"

He said, "Well, why are you here, Herr Schmergel?" So I said, "Herr Doctor, I'm sorry." And I spoke German, okay? "I'm sorry to let you know I am here to relieve you of your position." He said, "You must be joking." So I gave him a copy of the letter, a Xerox copy of the letter. I didn't want him to tear it up, and then I . . . He looks at me, and he said, "Can I call Charlie Schwartz?"

I said, "Yes. He's in Japan, and, you know, the time difference." I said, "We can call him." I said, "But I'm here, and I want to move quickly." I said, "Please, you know, get your stuff and go home and see your lawyer and come back with your thoughts." I said, "I'm authorized to negotiate your settlement." I said, "The less trouble you give me, the more generous the settlement will be. You've got to leave immediately. I want to call a company meeting and tell them what's happening." So—

THACKRAY: How old was he?

SCHMERGEL: Like twice my age. He was a war veteran, a tough guy, but—and he realized—he made a quick calculation. He figured he’s gone. The letter was the letter. He might as well try to get the best package he can. He went home, did not give me trouble. The next morning came back with his lawyer, and we very quickly . . . I called in our lawyer, and the local administration guy negotiated a deal, transferred money to his account, and he was gone. He did not give me trouble, I will say.

THACKRAY: What year was this now?

SCHMERGEL: I started at Baxter in 1967. This was 1969. I was twenty-nine years old. The next morning, I called a sales meeting. The heart of the company was the sales force, not the office people. I asked the sales manager to organize it. We had about twenty-five salesmen. He had hoped to . . . he knew that his boss was in trouble. He had hoped to replace him. He was very unfriendly to me. But I felt I needed him. So I said to him . . . the sales meeting was organized in Frankfurt, which is a central point, at an airport hotel there. We were going to catch an early morning flight to Frankfurt, go to the hotel, meet the sales force. I’m sitting waiting for Claude in the airport, and he’s not showing up. [laughter] I get on the plane, right? I fly to Frankfurt. Again, no cell phones. I can’t call the guy or anything. You know, I don’t even know how to use the German phones. Putting in the deutsche marks in the thing. I go to the sales meeting, and I from there call the office. His name was Claude Hilger. He was from the Alsatian part of . . . which is sometime German, sometimes French. The office says, “Well, he called in sick.” I said okay. I’m holding a sales meeting with these people, who . . . and just talking about in general what we’re going to do, and everything that’ll change—

THACKRAY: And these are all . . . the sales force is German nationals?

SCHMERGEL: German nationals, all German nationals, men and women. We had quite a few female salespeople there. We were selling to the medical field and hospitals. The next morning, you know, I fly back to . . . or that night, whatever, I fly back. So Hilger comes to the office, pretends he had a cold. I say to him, “Look,” I said, “you weren’t there.” I said, “You weren’t there when I needed you.” I said, “You’re fired.”

“You can’t do that. You can’t do that.”

I said, “I sure can.” I said, “You were not there when I really needed you.” I said, “It was very tough for me, and all—” So I said, “Just go home, and that’s it.”

I promoted one of the [district managers] that I met, kind of, based on almost a snap judgment, to be sales manager <T: 50 min> the very next day. That was a very tough

beginning. Very tough beginning. I spent two years in Germany building up the German operation. Great market. Again, the European hospital markets were moving towards accepting higher quality products, which is what we had. One day I get a call from my boss, the vice president Europe. I report to the vice president Europe, who was in Brussels, [Belgium]. Brussels by that time was the manufacturing base for Germany, a factory with five hundred people. My boss says . . . his name is Bill [Wilbur H.] Gantz, a very good guy. We are still very, very close personal friends. “Gabe, I need you to come to Belgium, take over the Belgium manufacturing plant and the Benelux because we are making some changes here.”

I said, “Bill.” I said, “I’ve never run a factory. I don’t speak French.” It was in the French part, Walloon part of Belgium. Don’t speak a word of French. He said, “Look, we need you here. Come up here tomorrow. We’ll discuss who will replace you in Germany. We have a crisis here. I want you here tomorrow.” I went home, said to Valerie, “I got to go. There’s no question, you might get a pay increase, or this or that—doesn’t matter. We are going to—” That’s how Baxter operated. I fly to Brussels. We discuss who my replacement will be in Germany, a couple of guys in Germany, then he had a German-speaking Belgian. He actually, kind of, wanted that guy to take over Germany. I said, “Okay, Bill, I only have one condition. Let me keep Germany reporting to me. I will run the Benelux,” which was a small market, but a big factory, and Germany was a big market, no factory. “Let me keep Germany also and have Jacques [Fonteyne],” who was taking over, “report to me.” I said, “That will be good for everybody, and continuity, and very sudden change.”

He said, “Fine.” He agreed. Pretty soon I’m running the heart of Europe, right? [laughter] The Benelux and Germany. This is how they operated at Baxter. The company asked for total commitment, total devotion, and . . . but you were rewarded, not with money mainly—I mean, we were paid [somewhat] competitively—but you were rewarded with enormous responsibilities. I was put in charge of a factory with five hundred people. Everybody’s French. I don’t speak a word of French. Every morning and every weekend, I’m taking French lessons. [laughter] Many of the senior people spoke English, but I felt I had to learn French to be able to really succeed in the medium or long run. Valerie packed up. Closed down our rented place in München, the garden spot of Germany, and moved to Brussels, which is a nice city, but it’s not a garden spot, you know, everything’s gray over there.

I did that job for a while—a couple of years—and then my boss said to me, “Gabe, you are being groomed to replace me to run Europe. But before that there is a necessary step for you to return to the States for a year or two to get some more corporate level experience.” Now this business issue is about what you hear today, at least until the recession, quality of life, or this or that. Where does your spouse work? What does she want to do with her life? We get on a plane, and we come back to the Chicago, [Illinois] area, Deerfield, [Illinois], where Baxter was headquartered. It’s, kind of, a mixed line and staff job in the international division. Within weeks, within weeks, the company says, “Gabe, we are having problems in Latin America. We’ll break it <T: 55 min> in two parts because the current guy running it is not coping with the whole thing. Gabe, you’re going to be in charge of half of it.” [laughter] Mexico actually was Central America. That was the heart of the business.

“Gabe, you’re going to spend three weeks every month in Mexico and then you come back for a week.” Because I did not want to move my family to Mexico. I knew nothing was long term. “You come back. You can do your paperwork and all here from Chicago, but you go to Mexico.” Mexico had all kinds of problems at the time, as you can imagine, bribing and everything going on, which was against the law.

THACKRAY: This was ’69, ’70 or something?

SCHMERGEL: Yeah. It was . . . no, now we are ’73.

THACKRAY: Seventy-three?

SCHMERGEL: Yeah. Now we are [in] 1973. I’m spending a lot of time in Mexico, basically ultimately ending up replacing the general manager there, but not with myself, with somebody else. I come back to headquarters. Then the company says, “Well, we have to have a huge asset management program because receivables are too high, inventories are too high, etc.”

Mr. Graham said, “Gabe, you are the right guy to run the international part of that. So we’ll authorize your project team of about forty, fifty people, inventory specialists, financial people. You will scour the world, every plant, every operation, look for opportunities to drastically cut inventories and receivables, tighten up asset management.”

I said, “Now, Valerie, I hope you are enjoying living in Deerfield, because I’m on the road again with my project teams.” I had broken them up into smaller groups. “You guys go here; you guys go there.” That was like three months. It was a crash project because the company needed to really free up a lot of cash.

After I’ve done that, Baxter said to me, “Well, now you are ready to go back to Brussels. You will be vice president of Europe. You will be in complete charge of Europe.” We moved back to Brussels. [laughter]

THACKRAY: You have still just the one child?

SCHMERGEL: What?

THACKRAY: Had you still just the one child?

SCHMERGEL: No. By that time, we had two. During my previous assignment in Brussels, in Belgium, our daughter was born. Yeah. We move back to Brussels. My daughter was born in 1971. Moved back to Brussels for four years. My job is then to run all of Europe, which at the time I left there after four years, we had five thousand people, enormous growth in sales, in profits, numbers of people. We bought some companies. Enormous learning experience. You heard yesterday Tuan Ha-Ngoc mentioning in his comments that he and I met in 1975. I'm taking this job in Brussels in 1975. I'm saying Graham has his MBA program. I'm going to have my MBA program. [laughter] So the best MBA school in Europe at the time—and probably still today—is INSEAD [Institut Européen Administration des Affaires] in Paris, [France]. I take my human resources guy. We go down to Paris and go to INSEAD to interview and find Tuan, who was finishing his . . . INSEAD at that time was a one-year intense program. I think it was like twelve months at that time. I hired Tuan to be my assistant, and he was just getting married to his lovely Vietnamese wife. Tuan comes from a very prominent Vietnamese family. Their family, as many others, left Vietnam when the communists <T: 60 min> took over.

Many of these Vietnamese went to Paris because of the French connection. He's marrying the daughter of another very prominent Vietnamese family. [laughter] They pick up and move from Paris to Brussels. We are living in Brussels. It's a great job in charge of everything in Europe, everything except R&D. R&D is centralized in the company in the US as at that time virtually all companies are. But I've got my own legal staff, medical staff for clinicals and product registration, factories, as I said, five thousand people. Some of the factories are unionized. I have to deal with the unions. Some are not unionized where we are fighting to keep out the unions. Just a very challenging job, a great job. Then one day we put our son into the local French school, too. We did not know how long we were going to be there, and in many ways, we really enjoyed living there, except the rain in Belgium. [laughter] One day, my boss, Bill Gantz, who later, by the way became president, not CEO, but president of Baxter, later. [He] says, "Well, I'm being promoted to be an executive vice president, Gabe, so the presidency of the international division is now opening up, and if you are interested, then you are our first choice." I said, "Well, of course I'm interested, right?" I'm on a plane and take over the whole division.

THACKRAY: In Chicago?

SCHMERGEL: In Chicago. Now here is a very interesting point, okay, interesting conversations. One of my personal friends in Brussels was the top guy at that time for Egon Zehnder in Europe. Egon Zehnder, a very big headhunting firm. But he was a personal friend, okay? He wasn't like trying to recruit me or whatever. In fact, he had done work also for our company. That's how I met him. Besides the professional relationship where he works for us, we have a personal relationship. He takes me out for a goodbye dinner, and he says to me, "Gabe," he said, "there's one thing I know having an international job." In those days, life was organized in most companies geographically. Later US business went to more a product line, global product group approaches. He said, "These big international jobs where you are based in

the US, whether it's New York, Chicago, Los Angeles, [California], are jobs that nobody lasts too long." He said, "The travel will kill you."

He said, "I'm predicting you will take that for two years, and then you will be so sick and tired of it." He said, "I've had X friends or clients or whatever get these jobs, and nobody lasts longer than two or three years, especially if they want to keep a marriage going."

I said, "Oh, Eric, I'm tough. No problem." [laughter]

THACKRAY: And this is when? What's the year you're taking this job?

SCHMERGEL: This is now 19—

THACKRAY: Seventy-nine?

SCHMERGEL: Like early 1979. Yes. Yes. So, 1979, early 19—

THACKRAY: So there's some writing on the wall that you're not reading. [laughter]

SCHMERGEL: Yeah. Yeah. Right. You know, you should listen to . . . when people who are older than you are and experienced, and they tell you things they have experienced. I come back. The job is a very good job in one sense. The whole division by that time is twelve thousand people, global job, Far East, plants in [Republic of] Singapore, everywhere. But it's constant travel, and then when you come back, you are always in corporate meetings, and the . . . is that your phone? <**T: 65 min**>

THACKRAY: Yes. We should—

SCHMERGEL: Okay.

THACKRAY: I think we're at a nice pausing point because—

SCHMERGEL: Okay. Okay.

THACKRAY: It's extraordinary, Gabe. You've painted this portrait of two halves of your life so far: the Hungarian one world, then translation to this other world spending an equal length of time mastering that other world, mastering it.

[. . .]

[END OF AUDIO, FILE 1.1]

[. . .]

SCHMERGEL: I'm running the international division. I am . . . when I first got the job, I'm thirty-eight, sort of, these two years between the age of thirty-eight and forty. My boss is two years older than I am. I mentioned Bill Gantz. He ultimately became president of the company. His boss, who is the CEO, is two years older than he is. I'm looking at people basically the same age, a little bit more older, a little bit more experienced. I am also tagged by that time as the international guy. I'm now thirteen, fourteen years in the company. I've only had international experience and exposure. I'm totally comfortable there. Yeah, I know everybody. Half the people I hired. But at the same time, I am in a job where you constantly have to travel, and when you are out there doing your job in the field, you are with the troops, you lose touch with the politics. The company is also becoming more and more political as it grows. The company is becoming a large company. Politics is becoming very important. A lot of the people, for example, are golfers—the top executives. They all go and golf on weekends. I don't golf. I tried golfing. I gave it up. I didn't like it. [laughter]

Then I also get in touch with a lot of my Harvard Business School classmates, as I'm now back in the States. And we talk. I go to the reunion, talk. Some of these guys, the age of forty, they have already retired. Not too many, but some of them. They had some entrepreneurial hits. They went public. Were bought out. There are guys . . . you know, I am a well-paid corporate executive, but in terms of real dollars, it's not that much, and the stock options in terms of real dollars aren't all that much. I'm interacting with guys who have a net worth at that time twenty times what I have. I'm realizing that there's a different world out there. Then some of these guys are saying to me, "Well, we'll introduce you, Gabe, if you are interested, we'll introduce you to my VC board members or this or that."

I'm beginning to kind of . . . getting into the network, the Harvard Business School network, which everybody says it's of tremendous value, that half the value of being at the Harvard Business School is the network. It may not be half the value, but it's a substantial . . . so I get back into the network. Then one of my good friends [Wally Cornett] says to me, "Gabe, you've got to meet the Greylock [Partners] people." Greylock is a very prominent blue chip, old school, and very successful venture capital firm. This fellow had already done two companies with the Greylock people, and he just worships them. He says, "Next time, you know, they

come to Chicago to my board meeting, I will arrange a lunch or a dinner for you; make sure you are not traveling somewhere.” One thing leads to another. I tell the Greylock folks that I’m interested in something, but something substantial, where it’s a venture-backed firm, where the CEO is maybe ready to retire, etc., etc. Keep me in mind. I tell this to a few other people.

One day I get a call saying that “Gabe, you are probably not interested in this, but **<T: 05 min>** we are working with two brilliant scientists named Mark Ptashne and Tom Maniatis. There is a little group here of blue chip firms, [JH] Whitney [& Company], Venrock firms, and Bill Paley as an individual. We have committed six million dollars to them.” Then they go through this whole business of the Harvard management company backing out. “But we are not going to release the money. The money is in escrow. We are not releasing it until there is a business person with them.” Mark and Tom didn’t mention that. The money . . . they raised the money, but they didn’t have the money. They did not have the money. The money was raised, but it was in an escrow account. They were not going to release to Mark and Tom [who] were always going to be part-time. There were no full-time people.

THACKRAY: We went backwards a little bit now.

SCHMERGEL: Okay. Right.

THACKRAY: Here’s Gabe, who’s gone like a rocket, but has plateaued, and you can see that long-term promotion in Baxter is now an issue because of the age. But so jump across to the . . . what you know now about the emergence of the Ptashne/Maniatis capital, how that all came into being.

SCHMERGEL: Right. Right. [. . .] I knew a little bit about biotechnology because, for example, one of my responsibilities is the hemophilia business, including manufacturing. My plant in Belgium was manufacturing the then currently leading hemophilia product, which uses raw blood plasma collected from students, from prisoners, collected in third world countries, like Nicaragua. I had one of those such a huge issue, the procurement of that plasma, so fraught with problems. We were not aware of AIDS [acquired immune deficiency syndrome] at that time yet, but we were aware of hepatitis, right? There were other . . . hemophiliacs are suffering. I’m aware of the uncertainty of the supply. You go to these hemophilia centers, and, oh, my God, I mean, this is the raw material? You know, people are . . . centrifuge, and, you know. But of course, that was the best available. I’m familiar with it, and I’m also aware of the budding biotech industry. I’m aware that Baxter is actually talking with Genentech [Inc.]. I’m not involved in the talks. It’s handled by the central group. But I’m aware that Baxter is talking with Genentech actually about . . . Genentech comes to Baxter with a proposal to genetically engineer the anti-hemophilia agent—the anti-hemophiliac Factor VIII—for hemophilia A. I’m aware of that. Baxter tells Genentech—Genentech is trying to sell the project—Baxter tells Genentech, “This is blue sky. It will never work.” Right?

I'm aware of Biogen, which got started in Europe, and actually, vaguely knew the head of Biogen [Robert E. Cawthorn] at that time. He wasn't a friend, but an acquaintance. I'm saying these guys have some interesting stuff. Biotech, you know. I'm kind of keeping my eye on biotech, but I don't have a vehicle to jump into it, and all. Mark and Tom then, as Mark explained to you, they had wanted to start a biotech company, and they got the idea in the mid-eighties or so, middle to late eighties. But they did not have the business knowledge, either. Harvard initially offered Harvard Management Company as essentially providing the management. Of course, Mark and Tom also, as they meet some of the folks in the Harvard Management Company, which is an investment management company and has had some periods of fantastic success, and some problems, also, after . . .

THACKRAY: This is now . . . this is late seventies?

SCHMERGEL: No, no, this is 1980.

THACKRAY: Nineteen eighty.

SCHMERGEL: Late 1980.

THACKRAY: So this is in part the <T: 10 min> Genentech IPO [initial public offering] is kind of . . .

SCHMERGEL: I think the Genentech IPO—I forget their year what it was—I think it was still privately held at that time.

THACKRAY: Yeah.

SCHMERGEL: Cetus [Corporation] was the first IPO.

THACKRAY: Yeah.

SCHMERGEL: I actually—

THACKRAY: But there was just interest—

SCHMERGEL: Yeah, we would have to actually look at when Genentech had its IPO. I think it was still privately held at that time. Cetus was public. So—

THACKRAY: Cetus had raised a lot of money.

SCHMERGEL: Cetus raised a lot of money. Yes. Yes. Yes.

THACKRAY: Yeah. They were going to do everything.

SCHMERGEL: Yes. Yes. Yes. Well, of course, we were also going to do everything. Then Mark and Tom had identified a number of the people that ultimately ended up as being our lab heads or senior scientists. But everything was very vague. Mark was saying, well, there was no business plan, and that is true. There was no business plan. There was no business plan. I actually have somewhere in my files a copy . . . it was a five-page typewritten page—we're going to do everything. Fifty projects on it, okay? They've just got a laundry list. It wasn't a business plan.

THACKRAY: That five page predating your own involvement?

SCHMERGEL: Oh, yes. Yes. Everything is now predating. This is 1980. I'm not talking to them. I am aware that this project is going on because I started to keep track of the biotech field. But there weren't all these newsletters like today. It—

THACKRAY: It's partly a sort of Boston response to San Francisco, was it . . . ?

SCHMERGEL: Partly. Right. Right. Partly. Right. Mark and Tom are having these discussions internally. But nothing is moving. Then the faculty . . . in those days, the faculties were anti-business, generally. It's less so today. The rest of the faculty members then turned on Mark and Tom. They turned on Mark and Tom, partially out of envy, saying, "Oh, these guys are going to make money?" If you don't mind, I will just munch a little bit. "These guys are going to make money?" Partially out of envy, partially out of just not understanding what it is. People were used to, let's say, physicists, nuclear physicists, making money working for the government part-time, right? Getting huge . . . by academic standards, big consulting fees. People were used to—

THACKRAY: One day a week.

SCHMERGEL: Which is flexible, right?

THACKRAY: Yeah.

SCHMERGEL: Which is flexible. [laughter] People were used to electrical engineers, let's say, starting companies, leaving academia, and starting computer companies or whatever, making all kinds of money. Molecular biologists, biochemists were the backwater in terms of industry. But all of a sudden, they come into prominence, and there are little sprouts here. They're sprouting, and people are saying, well, these molecular biologists all of a sudden start to become stars. They are being courted by industry. They are courted by venture capitalists. The Harvard faculty turned on Mark and Tom. Then the project as a Harvard project was dead. At that moment, I thought, "Well, this can be interesting. If Harvard Management had been involved, I would have never even bothered to meet Mark and Tom." Now I knew enough about the venture business that you get the administrative structure of a university involved, it's death, okay? There's no need to waste your time. You want to get the technology, you want to get the people, but don't want to have anything to do with the administrative and financial people. That's totally different. They are different.

THACKRAY: Last night, there was a reference to a meeting at Chicago Airport.

SCHMERGEL: Yeah. I wasn't there. That was all before my time.

THACKRAY: Okay. Okay.

SCHMERGEL: Yeah. Yeah.

THACKRAY: Yeah. The telephone call to you is after the project's death.

SCHMERGEL: It's <T: 15 min> dead.

THACKRAY: But the money has been found somewhere else? By who? Who's the leader of this dance?

SCHMERGEL: Okay, what's the . . . now actually, as Mark was explaining . . . Mark was and is very entrepreneurial, and then he would talk about one of his neighbors who was a management consultant. He mentioned the name Tom [Thomas S.] Hexner. It's not all that relevant what his name is. Then Sheryl [Handler], who worked with Tom Hexner. She's actually an architect. A smart, savvy lady. They are saying to Mark and Tom, "Well, we will advise you. You know, we will advise you on how to go about it." Then I actually don't know who made the introductions to Greylock and Venrock and JH Whitney. [. . .] But then it, kind of, gels where a consortium is formed. Bill Paley, Benno [C.] Schmidt [Jr.], Venrock, Tony [Anthony] Evnin, and Dan [Daniel J.] Gregory, Greylock. They actually drew up, and this is pre-Schmergel. They actually drew up corporate papers, incorporate the company. It's all on paper. They put in ten dollars, right? They were promised six million, but they are not releasing the money. They were not going to give six million; there was no structure, no business, nothing. They were two brilliant scientists, there was a five-page laundry list of projects, and they wanted to put pressure on Mark and Tom also to bring a businessman in.

They hired a headhunter, but I never dealt with the headhunter. They hired a headhunter, and they actually had been interviewing a number of people. For various reasons, they are not getting along. A lot of it was based on personal chemistries and all that. One was Jan Leschley, who ultimately became the head of [Bristol-Meyers] Squibb [Company], had an unbelievable corporate career later on. I also know they interviewed a fellow that I didn't personally know, but vaguely, kind of like third hand, I knew, a senior guy from ITT [Corporation], a big conglomerate at that time with a very good reputation. So all this is going on prior to Gabe Schmergel, but nothing is really firmed up. As I said, I met Dan Gregory from Greylock, and then Dan said, "If you're ever in Boston you should come by our offices, and I will introduce you to Mark Ptashne and Tom Maniatis." I thought, "Well—

THACKRAY: And this is now late '80? Or when is that being said?

SCHMERGEL: Early '81.

THACKRAY: Early '81. Okay.

SCHMERGEL: Or it could be late '80. I forget. I figured, well, I was always going from Deerfield, Chicago to Europe, so it's no big deal to stop in Boston for a day. I could arrange it so that nobody would find out until six months later when I turn in my expense report. I had a very loyal secretary; besides that nobody knew. I stop in Boston one day. I go by Greylock, and Dan Gregory takes me over to Harvard, introduces me to Mark and Tom. These guys are in

jeans. [laughter] I remember it was a cold day. Jeans and t-shirts and long hair and all. And sandals. I mean, they were poor. They were tenured professors, but they were <T: 20 min> poor. We actually got along extremely well. We spent three, four hours talking. We just get along well. Then they ask me, “Are you interested to have some further talks?”

I said, “Yeah, sure.” They talk to the rest of the venture folks and all. So then we started a process which was I would stop in Boston three, four times on my way to Europe, then also in New York, where it’s, “Yeah, you’ve got to go to New York and meet Tony Evnin, and Benno Schmidt, and Bill Paley.” So it’s a process. Then more and more, I’m getting excited getting in on the ground floor, and I really like Mark and Tom. They introduce me to a couple of the senior scientists that they had lined up, who were still in academia in a waiting mode. I also liked them, and they liked me. Then we get into negotiations. We get into negotiations for a deal equity participation, a contract. Things are becoming more and more firm. Then of course, I was also very excited about coming to Boston. [laughter] Because this is a great place, right?

THACKRAY: Yeah.

SCHMERGEL: Great city. I . . . you know, I’ll be honest with you. I figured . . . at that time, nobody knew if genetic—it was called genetic engineering. It wasn’t called biotechnology. Nobody really knew if it would work. There were no products on the market. Nobody knew how the FDA [US Food and Drug Administration] would react. Would there be toxicities, whatever? But I figured, if worse comes to worst, I can always go back into industry. I will have lost a step here, but I had a great record, and I figured, well in the past I was approached by Baxter’s competitors. If worse comes to worst, I’m not going to starve. If I’m going to do something, also, I figured, well, I am forty. I still had enormous energy. It’s not a bad time, if I’m going to do . . . the kids were young. It’s easy to move. My wife and I didn’t like the weather in Chicago. We are outdoors people. We always do outdoor sports. When we lived in Europe, we were always riding horses and things like . . . Chicago, you can’t do any of that stuff in Chicago. We liked to go hiking, not mountain climbing, but hiking. There are no place to hike there because it’s flat. There’s nothing there. [laughter] We said, “It could be interesting.” It could be interesting.

I already knew that we will need corporate partners, and I already knew that Baxter could be a source of both financial support and marketing support and all for me. Then I had to make sure that my departure from Baxter is under best possible terms. As things start to firm up, I basically hinted or maybe more than hinted. I mean, I’m trying to remember now. It was thirty years ago. I’m thinking, and so I turn in my resignation, but immediately say what I’m going to be doing, and I said to them, “I am one of your possibilities into this unbelievably exciting new field of biotech.” I said, “You guys know me. I’m going to have to go there for three or six months, figure out more what’s going on. We will want corporate partnerships. We will—” I knew we had six million dollars. I, kind of, knew it’s not a lot of money. I said, “We will need more money.” So everything was done on . . . you don’t burn your bridges. Because in fact, six months later, I was back here asking them to make an investment, which they did. Which they

did. That's how we got started. <T: 25 min> That's how Baxter became one of our first corporate partners. The other one was Sandoz [Pharmaceutical]. You might have, if you remember, briefly, Tuan Ha-Ngoc mentioned Sandoz. We had partnerships with Sandoz. I knew Sandoz from my days in Europe. I knew some of their top executives. So again it was very easy for me. At first you go to the low-hanging fruit. You go to your contacts, people that you know. And—

THACKRAY: So when did you actually join Genetics Institute?

SCHMERGEL: April '81.

THACKRAY: At that moment, it was a piece of paper that you joined?

SCHMERGEL: [Yes.] I got—

THACKRAY: And Mark and Tom on a day a week.

SCHMERGEL: It was a day a week basis, which actually it's a day a week, five days a week, and then the whole weekend. They were . . . in those days, Mark and Tom were very involved. That also put enormous pressure on me because five days a week I'm looking for lab space, ordering equipment. I mean, and I'm also doing stuff that I've not done ever. I've never managed research and development. During virtually all my career at Baxter, I would just say to other people, "Look you do that." There I was actually doing things. We find our first lab space in this abandoned hospital building. It's a huge building—Boston Lying-In Hospital—which the Brigham & Women's abandoned. They were looking to rent out part of the building to whoever. They didn't know what to do with that building. Today it's complete remodeled, and they invested many tens of millions of dollars. But that was a period they didn't know what to do with the building.

THACKRAY: Well, so where is that building?

SCHMERGEL: Longwood Avenue.

THACKRAY: So you were just renting ten thousand square feet or so?

SCHMERGEL: [Yes.] Basically the clinical labs because all the benches and the plumbing, everything was there. We just needed to get our specialized equipment in. I brought one guy with me from Baxter. So my boss, Bill Gantz, said to me, “Now, Gabe, I know probably a bunch of people are ready to go with you.” He said, “If you and I are going to be friends, you can take one person. If it’s more than one, you and I are not going to be friends anymore.” I took my financial planning guy [Mirza Mehdr], one of them, with me. I figured he’s going to take care of the financing—not the financing—the financial stuff, the accounting. He’s a certified CPA. A Pakistani-American guy. Again, we are still friends. Later on he left GI to get into the artificial intelligence business with a very famous company called Thinking Machines. You may have heard about it, Danny [W. Daniel] Hillis.

THACKRAY: Yeah. Yes.

SCHMERGEL: Went up, then back down. He spent ten years there. So on day one the physical establishment is June 1 of ’81. We move into this twelve thousand square feet clinical labs. Five of us, two scientists, two other people that Mark and Tom had identified, Mirza Mehdi, myself, and a secretary that we hired to take care of all the just typing, paperwork, answering the phone, and all that. That’s five of us. You heard also the reference to the . . . I said not only to the four people working for me and myself, but later on, even when we had a couple of hundred people there, you guys get <T: 30 min> mugged, just give them the money. Don’t fight. Don’t try to run away. Don’t get hurt. We need you. I said, “The company will reimburse you for the money.” Twice, I actually reimbursed people, just based on their word. They said, “Somebody took hundred bucks off me,” or whatever. I said, “Sure,” and went to petty cash, you know. “So here’s one hundred. You know, no resistance. Don’t get in trouble.” Because now the area has been upgraded. The Harvard Medical School has expanded enormously. Probably billions of dollars of new buildings were put up. But in those areas, it was very iffy. I used to be worried in the evening going to my car. I used to be worried myself, and looking behind—is somebody following me? [laughter]

I mean, and then the weekends, we would be with Mark and Tom sitting around Mark’s kitchen table. Mark was single at the time. He did have a girlfriend. Mark always had a girlfriend. [At that time, she] was the separated wife of a very prominent Boston conductor. They were separated. Lovely, lovely, lovely woman. She wouldn’t be there fixing food for us. We would send out. She was way above that. We would be sending out for Chinese food or pizzas. Some of us liked pizzas. Some of us liked Chinese food. There was always a big argument, what do we order, because these meetings would go into the evenings. Mark and Tom in those days played an incredibly, incredibly important role, as we were hiring scientists, sorting through what should we do. What direction should our research go? Just general, I knew nothing about biotechnology, so I was, kind of, learning. As we were going along, they gave me some books to read. But that was basically it. I could not take time to take a biochemistry short course anywhere, yeah? I would read a few books. I’d have the guys and the gals explain things to me. I would understand, sort of, halfway or one-third. [laughter]

Those were interesting, interesting days, interesting days. One thing, again, that I learned there was . . . and that comes from Mark. Once I was complaining that somebody was trying to confuse me with what they were doing. Mark said to me, “Gabe,” he said, “I don’t care how complicated the particular project is or the technology that they are working on. If they cannot explain to you in five minutes in clear language so that you understand that, not having the background, so you understand it, then it’s not your fault. It’s their fault.” He said, “Then they don’t know what they are doing.”

He said, “You have to force them to go over and over again five-minute segments, and if ultimately they cannot do it, then they’re trying to fool you, or there’s something wrong. Then tell me, and I come and see them.” This business of boiling down very complicated issues, and we could talk now about global warming or any of that stuff, all this data flowing around. It’s got to be boiled down and in clear, understandable terms, so that action-oriented people who are not specialists can then do something with it. [laughter] I said that we started to get corporate investments. My [contact] at Sandoz put some money in. Baxter put in initially ten million dollars. All of a sudden our capital base keeps expanding. Then also we refine a strategy where we mix corporate collaborations with keeping certain products or parts of certain products that we might have a deal in Europe and in Japan, but we keep the US market, but this was a very gradual thing. Early on, we basically just needed money because we had to build out the infrastructure. I also realized that <T: 35 min> pretty soon we’re going to have to move from the Boston Lying-In Hospital. That wasn’t a good place to really build a company. It was a good place to start. We start to look for permanent facilities in Cambridge, [Massachusetts]. Mark and Tom tell me that they want to be somewhere which is fifteen minutes transportation from Harvard Square.

We find a place in Cambridge near Fresh Pond. Fresh Pond, a warehouse, a huge warehouse that is available to purchase. After doing all the due diligence and everything, architects, whatever. I go to the board. Mark and Tom, all they wanted to know, is it within fifteen minutes? I said, “Yeah, you can take the subway, the T.” Then again comes Bill Paley. So Bill Paley says to me, “Why are you recommending this particular location?”

I said, “Well, Mr. Paley, I looked, and explained the constraints, and there was the issue of, municipal regulation.” So biotech at that time, a whole other story. I said, “I met several times with the mayor of Cambridge, who on the surface was an Italian guy, very rough, and for public consumption was ranting and raving against biotech. I met with him privately.

He said, “Don’t worry.” He said, “We want you guys there. I want employment. I want taxes.” He said, “And don’t worry.” This is an old Italian politician. He said, “Don’t worry. I’m not going to ask any favors from you later.” He said, “Don’t worry.”

Because I was having done international business, everybody’s always asking to be bribed. He said, “Don’t worry about it.”

There was going to be a public hearing, and he said, “Gabe,” he said, “the public hearing, I’m going to roast you.”

I said, “What?”

He said, “But don’t worry about it.” He said, “I want you here.”

I said, “Okay. Thank you.” “Don’t worry.”

I’m trying to get the board to approve that decision. Bill Paley looks at me and said, “Well, have you really looked at every single available space?”

I said, “No, sir. I looked at the space that our real estate [consultant] identified. So we looked at a limited number of spaces, and this—” Bill Paley looks at me, and he said, “Don’t come back until you look at every single piece within that radius, piece of real estate, land or building” Nobody on the board says anything. So next board [meeting], I go and look at some more spaces. Next board meeting, I say, “I looked at every single piece.” Which, of course, was impossible. [laughter]

But anyway, Bill Paley says, “Fine.” So then, we buy that warehouse. Then another unique thing happens, and that’s how I end up meeting Terry [Terrance] Murray. You know who Terry Murray is—very famous banker? Fleet [Boston Financial]. Based in Providence, [Rhode Island]. How do we finance it? I have X million dollars of equity at that time. I didn’t want to spend it all on a building. We needed a loan. But no bank is giving money to biotech companies. My financial guy talks to the Fleet people, and ultimately, we work our way up so that Terry Murray wants to meet me. So we get into a car, go down to Providence, and meet Terry Murray, who at that time wasn’t yet as famous as he became later, and made a presentation. We are the first biotech company here in the East Coast to actually get a loan from a bank to construct our own building. The loan was secured by the building, but Terry Murray knew and I knew . . . at that time biotech was still a totally unknown and uncertain. That was a specialty building. So it’s not like an office building people go bankrupt, you bring somebody else in, or a general purpose manufacturing facility. It was a highly specialized building. So it was a very <T: 40 min> high-risk move on the part of Fleet Bank. But Terry Murray believed in biotech, or he believed in us, or some combination thereof. Being able to borrow at that time ten, fifteen million dollars that we needed to construct the building, which took about a year, and then to move out of Boston into that building in Cambridge. Let’s see. Now what do you want me to talk about now?

THACKRAY: Well, so the picture I have, you’re hiring people. You’re finding space. You’re starting projects. But what are you actually doing? Is it multiple projects? Is it one great white hope? What’s—

SCHMERGEL: Multiple projects. So one of the things . . . we are still at a stage . . . maybe insulin was approved by then. I think it was the first . . . or human growth hormone.

THACKRAY: Insulin was the first.

SCHMERGEL: First and the second was human growth hormone. Still enormous uncertainties. These are very small molecules, very small molecules, enormous . . . so certainly I understood, but so did our scientific people. By that time, of course, after one year, we had our first full-time scientific director in the company, Bob [Robert] Kamen—Dr. Kamen—who was at the meeting last night.² I don't know if you met him or not. He was a very prominent American scientist who was working at that time at the ICRF, Imperial Cancer Research Foundation, in London, [England]. Mark or Tom or maybe both knew him. We interviewed a number of other people also, but we chose Bob Kamen to be full-time head of research. So for about a year, the senior scientists reported to me. I'm setting up the company, making business deals. The senior scientists report to me. Of course, what it really meant in reality, and that was Mark and Tom playing a major role, spending at least a day; I couldn't possibly understand and supervise the science. I could say, as I think [John Knopf mentioned to you], "Gabe would be coming into the labs every day, 'Have you cloned this?'" [laughter]

But beyond that, I could say, well, if they show me a gel, well, whatever, right? The time came when the part-time involvement of Mark and Tom was no longer feasible. We needed full-time people. I also knew that eventually they would lose interest. Now as it turned out, I was wrong. Mark lost interest. Tom never lost interest. Tom was in there until the last day until the company sixteen years later—until the company was acquired. Mark started to lose interest, and you could also see from the personality type; Mark has a short attention span. The company was established, and there was stock. It had a paper value. The real value was uncertain. Mark could feel that he owns X percent. I forget the numbers, let's say ten percent. What do I own? Ten percent of the company. It's all on paper. Mark is a superb musician, violin, superb. So he was joking about the violins.

His interests change. His interests change. He gradually spent less and less time there, and over years, his role declined. Ultimately, also left the board of directors. Tom always maintained a very steady level of involvement. Part-time, but very steady. Tom . . . and I think that's also . . . if you have to kind of like apportion credit, you give a lot of credit to Mark in the <T: 45 min> early days. He's aggressive. He's a salesman. He was very good at raising money. Then you give a lot of credit to Tom for a, kind of, steady, ongoing interest and involvement and interaction with the full-time scientific people, supporting me when I needed help, explaining things to me, getting an alternative explanation or evaluation. Or, obviously, I had a number of people inside the company, some of whom were there last night, who were also very high maintenance, very high maintenance. As a general rule of thumb, the more brilliant a scientist or an engineer, the more high maintenance they are. It's very rare to find somebody like Tom, an authentic genius, who is a steady, steady personality, and is not high maintenance. Very rare.

² Robert Kamen, interview by Mark Jones, Boston, Massachusetts, 10 November 2014 (Philadelphia: Chemical Heritage Foundation, Research Interview Transcript # 0159, in process).

THACKRAY: Yes. That relationship was initially, sort of, professor-student, mentor, whatever. But in the company, were they equal shareholders, or—

SCHMERGEL: [Yes. More or less equal, as I recall.]

THACKRAY: Yeah.

SCHMERGEL: Yeah. But that relationship evolved during the years. So it became equalized, from a mentor-mentee, equalized. Then because of the personalities, Tom is universally beloved by all and Mark is less so. Just a complicated thing. And so it's a very complicated . . . and that relationship with [James D.] Watson, right? I mean—

THACKRAY: Is fraught.

SCHMERGEL: What?

THACKRAY: Fraught. Fraught.

SCHMERGEL: Yeah, with complexities. I mean—

THACKRAY: I don't think Jim has simple relationships on his side.

SCHMERGEL: Yeah.

THACKRAY: Yeah. Yes.

SCHMERGEL: [. . .]. So—

THACKRAY: But after Hungarian communists, this was all manageable.

SCHMERGEL: That's right. That's right. For a long, long time . . . and that was one of the reasons when the buyout took place, then I retired. It was a very nice exit point for me. AHP [American Home Products] wasn't all that interested in me staying, also, to be honest with you because even though they appointed Pat [L. Patrick] Gage, who was the number two guy in the company, appointed to be my successor as president of the GI division of AHP [American Home Products].³ But having me depart has allowed AHP more influence, then, as they were . . . and it's also natural for somebody like me, then to leave. As I said, it was a very, very convenient exit point. My best friend inside AHP was Fred Hassan, who was on our board. Fred later on ended up running Pharmacia & Upjohn. Then Schering-Plough [Corporation]. One of the most outstanding human beings and corporate executives who I had—because he was on our board [and had] a chance to work with. Fred was unhappy in AHP because Jack Stafford, the CEO, would not come up with a timetable to retire.

Fred was naturally ambitious, and he was chafing—I shouldn't say—chafing is the wrong word, but he was anxious to become a CEO, let's just say. Fred had told me that he loves the company, but he needs a definite date. He's not going to be there forever because Jack Stafford may never retire. I mean, theoretically speaking. When Fred was approached by Pharmacia & Upjohn to become their CEO . . . Pharmacia and Upjohn merged. The merger was not going well. They had merged, but there were all kinds of issues. They were looking for an executive who would merge the two cultures—the European culture and the US culture. They approached Fred to be CEO. So I also knew that Fred isn't going to be there . . . he was my friend inside <T: 50 min> AHP, but I knew that that's not a permanent situation.

Another fellow there who was on our board for a while with whom I got along very well, Ben Canavan who was the chief operating officer under Stafford, had retired from AHP. I lost another friend there. One friend I lost. Another one I knew wasn't going to be there unless Stafford announces a given date to retire, like, let's withdraw from Iraq by the end of the year. No matter what. You know, no matter what, we will withdraw. Stafford was unwilling to make that commitment to Fred Hassan. So for me, it was a convenient exit point. But also, I will tell you, I was really burned out in trying to manage let's say maybe a dozen people like . . . and I'm not saying I managed Mark, because they were . . . Mark was only part-time. But he's an example of complicated, very highly talented, very difficult people that have to be motivated, guided, cannot be pushed too hard. [laughter] Just have to be nudged and convinced. It just burns you out. At the age of fifty-six, I said, "I don't want a full-time job again." I retired. It was just a personal thing. My wife and I had always been totally involved in ballet as subscribers, going to the ballet, just as one of our passions. So the Boston Ballet, I had friends on the board who found out I retired, so they recruited me on the board. Before I know it, before I know it, I am there two days a week at the ballet.

STOKES: Wow.

³ Pat Gage, interview by Brian Dick at Gage Home, Bryn Mawr, Pennsylvania, 30 September 2013 (Philadelphia: Chemical Heritage Foundation, Oral History Transcript # 1006, in process).

SCHMERGEL: Involved in everything. The ballet is going through . . . these companies go through every three years a huge financial and other crisis. Valerie is saying to me, “Gabe, what are you getting into?” The board there and the donors, a lot of them are wealthy females. Whether they’re single or married or whatever. She says, “How are you going to deal with all these women?” She said, “You don’t have the style. You don’t—”

“Oh, I know how to deal with difficult people. Don’t worry.” Well, that only lasted five years. I just couldn’t take it anymore. It was like herding a bunch of cats. You’ve heard that expression? I got into some other stuff, then, because for a long, long time, I, kind of, enjoyed dealing with difficult people and getting them [to focus]. Productive but difficult, and it was a personal challenge to get them to do the right thing. Then after a while, that kind of burns you out. That’s why now I am in the phase of having withdrawn from everything; there’s this one board I’m on. I’m going to a board meeting in a couple of hours and tomorrow. That is mandatory retirement at the age of seventy-two. After that, I’m free. [laughter]

[. . .]

[END OF AUDIO, FILE 1.2]

[END OF INTERVIEW]

INTERVIEWEE: Gabriel Schmergel

INTERVIEWER: Mark Jones

LOCATION: By phone

DATE: 18 September 2012

SCHMERGEL: I stopped by in Boston. I was constantly commuting between Chicago and Europe as well as the Far East. I just basically stopped in Boston on my way from Chicago to Europe. I met with Dan Gregory. Dan said to me . . . and it was actually just like a one-day visit. I spent a couple of hours with Dan, and then he said to me, “Gabe, I would like you to meet with two scientists at the Harvard biolabs, Mark Ptashne and Tom Maniatis, with whom we are working to try to organize a biotech company since the Harvard Management Company pulled out of the project.”

JONES: Right. Let me ask you about that because this is not in the transcript, but certainly, you talked to Mark Ptashne and Tom Maniatis, and what was their feeling about that—about Harvard sort of pulling out of the deal that—

SCHMERGEL: Right. Right. They felt a tremendous feeling of betrayal. So Mark and Tom were two idealistic scientists who felt that their science, basic technology platform, they thought could form the basis of a biotech company. There were by that time a couple of precedents established. Genentech had been in operation for a couple of years already. Biogen had been in operation. There was empirical evidence that the technology platform had promise. In those days, and this was health care, but also people were thinking of industrial and agriculture applications.

JONES: And did . . . I’m sorry to interrupt, but I just—

SCHMERGEL: No.

JONES: On that point, did Genetics Institute consider chemicals and agricultural products at all, or was it—

SCHMERGEL: Yeah.

JONES: Yeah? You did?

SCHMERGEL: Yeah. The answer is yes. The answer is yes. Not from day one, but later on. Certainly like every other company, Genentech had industrial projects, and some of them came to fruition, and then they spun off a chemical group. I forgot the name.

JONES: Genencor [International].

SCHMERGEL: You probably know the name.

JONES: Yeah. Genencor.

SCHMERGEL: [One] of Amgen [Inc.]’s initial lead projects was a color, an indigo blue kind of a color that would be used in jeans. Genentech had an agricultural division for a while that they disbanded. We had an agricultural division, ultimately, that we sold to Dow Chemical, actually. I mean, it was a sideline. It was a sideline. We actually owned a significant interest, and also in a seed company that we purchased to actually carry things through from the lab into the field. Then as we realized . . . so now I’m going down several years down the road. The company’s name was United AgriSeeds [Inc.]. I was on the board of United AgriSeeds, and I was flying off to Iowa once every two months to the board meeting, and you know? Then we realized that the agricultural applications alone would absorb enormous capital and resources, scientific resources. At that time, Dow Chemical became very interested because of the interplay with [pesticides]. I remember having had discussions with Dow Chemical where they were saying, “Well, we are taking a twenty-year horizon. Our horizon here is twenty years.” [laughter] I didn’t say it to them, but I said it to myself, “That’s what it will take.”

JONES: Yeah. And that—

SCHMERGEL: And by the way, that’s what it took in real life, too.

JONES: Right. Right.

SCHMERGEL: So actually, Dow Chemical <T: 05 min> purchased that whole business, and actually, interestingly because we got a decent price, we actually ended up making money on it. Not that was not the primary consideration. The primary consideration was to basically find a

home for that business, and maybe not take the rights. But it actually ended up making a modest profit—several million dollars—on our investment there.

JONES: Good.

SCHMERGEL: So everybody was looking at . . . in those days, everybody was looking at various applications. People had diagnostics projects. There was also a lot of other stuff going on. Genentech started to focus, Amgen started to focus, we started to focus as we all realized—the boards and the CEOs and chief scientists—realized that if you become over-diversified, you just cannot possibly support either from a capital standpoint or from a scientific resources and management standpoint these side businesses. What then turned out to be the leading companies all ended up focusing in the therapeutic area. Not even in the diagnostics area, but in the therapeutic area, which provided actually the biggest . . . well, provided the most favorable risk-reward tradeoff profile.

JONES: Very good. During this period, at the leading companies, all of the scientists really knew each other. Ptashne and Maniatis, they knew [Walter] Gilbert and [Phillip A.] Sharp, right?⁴ They were aware of these guys—

SCHMERGEL: Absolutely. Absolutely.

JONES: Just right down the street.

SCHMERGEL: Yeah.

JONES: So—

SCHMERGEL: They all knew each other. They in many cases respected each other. In some cases, they were competitive with each other. For example, I'm, kind of, telling you all this out of school here. Like Mark Ptashne and Wally Gilbert were very competitive. They were very competitive, not only because they both are very competitive personalities, but because their scientific work was somewhat overlapping. Wally ended up getting the Nobel Prize, and Mark ended up not getting the Nobel Prize, which Mark never forgave Wally for that. [laughter]

⁴ Phillip A. Sharp, interview by Arnold Thackray, David C. Brock, and Mona Ashiya, Massachusetts Institute of Technology, Cambridge, Massachusetts, 28 January, 29 May, and 20 November 2003 (Philadelphia: Science History Institute, Oral History Transcript # 0268).

JONES: Did he—

SCHMERGEL: Well, of course to be honest with you, scientifically what they did was essentially equal, but there's a lot of politics involved in getting the Nobel Prize.

JONES: Sure. Did Mark Ptashne and Tom Maniatis . . . did they express this competition? We need to beat Biogen, or we need to beat Amgen, or—

SCHMERGEL: Oh, absolutely.

JONES: Yeah? So—

SCHMERGEL: Absolutely. I mean, we were all had some projects that were different and some projects that were the same, and there were races. Like EPO [erythropoietin] was a race. Factor VIII was a race between Genentech and us. EPO was a race between Amgen and us. I ended up . . . I made some good decisions, maybe some not so good decisions in my life, tremendous uncertainty. I ended up very quickly de-emphasizing in the first year, basically not even getting into or to the extent that other did getting away from interferons. I got a very bad feeling about—I'm not a scientist or a physician—but I got a very bad feeling about what I saw was going on. So many companies working on the same . . . everybody was working . . . you're alpha, beta, or gamma, or some companies were working on all three. I said, "This is a mess."

JONES: Yeah. The timing there, was that . . . Charles Weissman had announced, Biogen had announced that they had cloned interferon. Was that prior to GI? I'm not sure.

SCHMERGEL: I forget. I forget. They might have cloned beta. That's [something] I forget. There were these big announcements, I mean, in academia, and then it was a question: do you rush for these and license it for a new company? That whole area of interferon was very confused, very competitive. <T: 10 min> And you will remember, there were a lot of questions—I'm going back now thirty years—a lot of questions. How different are these interferons from a biological point of view? Why do they have a potential different application? So . . .

JONES: On your part, that was . . . it turned out to be a good decision because the interferons never really became that important medically or commercially, right?

SCHMERGEL: Right. Right.

JONES: I mean, there were some successes, but—

SCHMERGEL: Right. They are really not . . . right. It turned out to be essentially disappointing. But some other products became far bigger than anybody expected. Erythropoietin was viewed as potentially . . . probably the very first in our studies in the market potential-wise, and Amgen thought . . . they probably viewed as less than one [hundred] million dollar product. [laughter]

JONES: Yeah. It turned out to be ten, twenty times, yeah.

SCHMERGEL: Like ten billion. Yeah. Yeah. Right. Right. The total market. Some things turned out to be much bigger than expected. Some things failed. TPA [tissue plasminogen activator] ended up failing, right? It was incredibly promising early on. It was very promising. It was also hyped, to some extent, but it was also promising, and—

JONES: Was that one that GI picked up? Did you work on tPA?

SCHMERGEL: We did work on tPA for a while, and then it turned out that Genentech had such a lead that ultimately, the whole thing didn't make any sense for us. We had a corporate partner on tPA—at that time Burroughs Wellcome [Fund]. They were very interested. They financed the work. But it turned out to be that Genentech was way ahead, and they also had the patent. They had a lock on the patent.

JONES: These are good threads to pick up. You mentioned corporate partners. That's an important part of the putting the science and business together. Let me take you back to the beginning. In the transcript that I have, you indicate that that's one of the first things that you identified to make this work. I mean, there was the venture money there that had been promised, and I think it was maybe six million, something, ten million—

SCHMERGEL: Yeah. Right. The venture money was there, and Mark and Tom actually had that commitment for a total of six million. But there was no company then. It was incorporated, but it was a piece of paper. The venture capitalists—Tony Evnin, Benno Schmidt, and Dan Gregory—they basically said, “Now look, you know, [you need a business plan].” Nobody was even paid. There were a couple of people verbally committed—a couple of scientists that Mark

and Tom recruited. Mark and Tom were at Harvard. They were only doing this part-time. They were allowed to consult one day per week. They had their academic salary. They were allowed to consult by Harvard. I think that policy is probably still there today. I retired fifteen years ago. I'm not keeping up with all the details of what's going on.

JONES: Yeah, I think that's a standard. Yeah.

SCHMERGEL: Right. Theoretically they were doing that one day a week, sort of, trying to put together the company as such, okay?

JONES: Right.

SCHMERGEL: But the VCs said, "Look, you guys need a business plan. You guys need a CEO. You are not intending to leave Harvard. You intend to work [at the company] one day a week. You need a full-time leader in the organization. Let's get somebody, if possible, from the health care industry."

JONES: And at that time, did . . . in conversations that you had with these guys—Benno Schmidt, Tony Evnin, Dan Gregory, others, perhaps—did you have discussions about . . . they knew about what you had accomplished at Baxter, but this is a very different kind of situation. Did you have discussions about the different demands of the two fields?

SCHMERGEL: Right. Yes. Excellent <T: 15 min> question. I had an excellent record in running businesses all over the world. [laughter] Running manufacturing, marketing, product registration, intellectual property, IP, everything, except my experience excluded product development and research, which at Baxter was centralized, as it is in most companies—centralized in a central R&D function. My experience was also running businesses outside the US. Not in the United States. I spent actually most of my career with Baxter living abroad, running their businesses in various parts of the world. Ultimately, the last four years, I lived in the US, but I was running everything outside the US, which basically meant that I was traveling all the time. The demands were totally . . . and I was asked about it obviously outright, but it was also clear to them, it was clear to me that I had no experience managing research at all. I was and I am . . . I use the term science-friendly. I was always interested in science and technology. At Baxter where we had a mixture of commodity businesses and highly technical businesses, such as [blood plasma] fractionation, and we were making the natural Factor VIII from blood plasma. In fact, most of the fractionation was done in the US, but I had a small factory in Europe, which provided extra capacity, which actually not only reported to me but was built during my tenure at running Baxter Europe. I was actually involved in constructing a relatively small manufacturing facility, which was an exact duplicate of the much larger facility

in the US. I knew a lot about [blood plasma] fractionation, the blood thinners, hemophilia, etc., etc., etc. I believe that the VCs had confidence in me as a generalist who can provide leadership, can organize various functions, who can get along with people. Benno Schmidt was fond of telling me . . . he was maybe a bit more honest later after I signed on, a good CEO can be very, very tough, but he has to be a very nice guy.

JONES: That's good advice. Yeah.

SCHMERGEL: If you're not a nice guy, you cannot be very tough because people won't work for you.

JONES: Right.

SCHMERGEL: They won't be motivated. I had confidence that I can add the research management. I can learn as I go along. I had confidence that Mark and Tom will be there part-time. I did not want Mark and Tom to be there full-time because then I would have ended up working for them. [laughter]

JONES: Because they would be—

SCHMERGEL: And, in fact—

JONES: Yeah.

SCHMERGEL: Right. I mean, they were world-class scientists. That was their playing field. But being their part-time, actually, I viewed as incredibly positive because I did not really know the science in detail. I was aware, for example, of what was going on at Genentech in general because Baxter had similar discussions with Genentech. I, kind of, knew in general, at a very, very basic level, what is going on in biotechnology. Biogen was in Europe. I knew some of the people at Biogen.

JONES: Who did you know?

SCHMERGEL: The fellow [Robert Cawthorn] who later . . . I forgot the name <T: 20 min> right now. The CEO who was running—

JONES: Cawthorn?

SCHMERGEL: Yes.

JONES: Rob Cawthorn?

SCHMERGEL: Cawthorn. Thank you. And he went on to run a pharmaceutical company in the States. My memory is failing me with the names. I remember I visited him, and I even tried to make some deals with him for my little startup, but never succeeded. I, kind of, knew in general what was going on. So having Mark and Tom part-time, I felt was a huge plus because I felt it would allow me to, sort of, learn about the science as I go along. They are recruiting the initial group of key scientists. Meanwhile, I organized everything, which of course started with organizing the labs, but then very quickly to go back to raise money.

JONES: Right. Well, I have a couple of questions here. I would like to talk about that, raising money, and talk about Baxter and Sandoz. But in terms of recruiting, they were recruiting? They knew where to find the right people—

SCHMERGEL: Absolutely.

JONES: Where did they come from? Do you recall who came in and where they came from?

SCHMERGEL: Right. Right. The people they recruited were all people that they knew personally. Some of them were from their own labs, and some of them were from other labs. For example, Steve Clark, who I'm trying to get also to speak with you guys—

JONES: Yes. Thank you.

SCHMERGEL: Was there and was from the lab of [Douglas] Berg out on the West Coast.

JONES: Oh, at Stanford.

SCHMERGEL: Yes. Yeah. Right. He already was known as an outstanding, outstanding postdoc and turned out to be more than outstanding. He would be one example. There was a chemist, George Brown. The first eight people, we gave them the title of senior scientists. They were essentially lab heads. The title was called senior scientist. They were the core group. So for the first year, year-and-a-half or so, we did not even have a full-time head of research in the company. Mark and Tom would be coming by, as I said, essentially one day of the week. The lab heads would be talking to them about their scientific challenges and problems. The lab heads reported to me. I was obviously dealing with all the administrative and support issues, hiring, and whatever, and I would sit in as much as I possibly could on the meetings that they had with Mark and Tom to try to learn more about what the hell was going on in the lab. So it was a very interesting setup. It worked while the company was small. It worked while we were doing the very initial things, establishing the basic cloning technologies, the basic expression technologies.

Obviously, some of the early projects . . . I mean, EPO was already known in the literature, so EPO was a target. Factor VIII was known that there is essentially a protein . . . nobody really knew what it was. It was assumed to be huge, and potentially too unstable to even if it's cloned to be able to be expressed. [. . .] Genentech was already working on it, and it was known. It was low-lying fruit. This setup worked for the first year, year-and-a-half. Once the science moved to the next stage, it became clear that we will need a head of science. I don't believe that, you know, on a part-time basis people can run anything. They can advise, they can guide, but they cannot run <T: 25 min> anything. So as we got to the point of fifty or seventy-five people, I felt that having a head of science who would then report to me, who would continue to be advised by Mark and Tom under the accepted mechanism of a scientific advisory board, that would work. It would help us go to the next stage. In fact, it worked out very well.

JONES: But this is potentially a little bit tricky when you're bringing in somebody around the science and has to be somebody who can work well with Mark and Tom because I imagine they're still very involved in sort of establishing the scientific direction at that point?

SCHMERGEL: Yes. Yes. It's very tricky. I had to manage big egos. [laughter] I had to manage big egos with so-called senior scientists also. But some of them were more retiring in terms of personality and maybe a bit easier to deal with. Some of the other ones had huge egos, and did not take kindly to normal industrial leadership, let's say. I very quickly realized, of course, that my job is to help them. The job is to create the environment where they can function well, make sure that we are in agreement what they are working on, but basically leave them an enormous amount of room to do things their own way because, again, while I never managed science, I did realize that you cannot tell scientists, "Go and invent something."

This is why most of big pharma failed and still continues to fail with research because they imagine that they can give people targets. Even sometimes they say, "[Given] the next three years, I want you to come up with a lead molecule." Even that is ridiculous. Maybe you can come up with a lead molecule in three weeks and maybe five years. You don't know. All

you can do is create the environment, provide the support in terms of other PhDs and technicians, and just, kind of, encourage them, work with them, try to convince them that they should spend most of their time thinking about the company projects, rather than going off in a completely wild direction. Recognizing that this is also not something that you can control. Some companies have the formal policy where they spend . . . like Genentech, I think it was either 10 or 20 percent of the time people are allowed to do what they want. We never instituted a formal policy like that. I just tried to work with the folks and convince them that it was in everybody's interest that they spend more of the time on what we agreed upon were company objectives.

JONES: Who was the first chief scientist that you brought in?

SCHMERGEL: Okay, so the first chief scientist, his name is Bob Kamen. He came from ICRF in London—brilliant guy, brilliant, brilliant guy. Heavy, heavy academic experience. Not at the time—at the time he came—he never worked in industry, and that was a general issue with anybody that came from academia directly. Never really had worked in industry or understood industry. He decided to take a flyer. We recruited him heavily. He decided to take a flyer. He wanted to come back to the States in any case. He joined us. He stayed with us for about five years—five or six years—as I remember. He's also a big ego guy. [laughter] **<T: 30 min>** Clearly, it was, again, a balancing act between him, between Mark and Tom, between him and some of the real superior senior scientists. Some of those eight turned out to be superstars, and some were maybe not superstars—still good—but not superstars. Bob went through a learning process also in adjusting to the biotech industry. Even jumping ahead now, as the company's molecules moved more from research now into product development, clinical studies, as we had to start to build manufacturing facilities. We had to spend increasingly a larger percentage of our resources on downstream activities. Bob disagreed at the time with how some of these shifts were managed and took place. There were some honest disagreements. I will say that Bob always took the company's interest first. But he viewed what to do differently from me.

So ultimately, Bob left. By the way, we are very good friends. I went to his wedding and everything. But we just saw things differently. Ultimately, he left. By the way, which was very interesting, he ended up running BASF [Corporation]'s US product development and research operations out of Worcester, [Massachusetts], working for BASF. He realized . . . a lot of this was downstream stuff. He realized indeed that what we were going through at GI was a natural development as the company's molecules moved more downstream. Unfortunately, BASF benefited from that learning curve and all. Bob was very successful at BASF, got some products on the market. Then he retired from BASF maybe ten or even fifteen years ago. He also I remember was joking with me, saying, "Gabe, I thought sometimes you were difficult to deal with, but you are easy compared to the Germans."

I said, "Well, see?" But anyway, so Bob then left, and having made significant contributions, but he did leave. Then we went out and decided to bring in our new . . . the chief

scientific officer from the pharmaceutical industry. That's when we hired Pat Gage, who you have already either interviewed or will interview. I know that Arnold [Thackray] has talked with him.

JONES: Oh, okay. Good.

SCHMERGEL: He's also on the email I sent you because Pat Gage came from [F. Hoffmann-La] Roche [AG], and while he worked at Roche both in the basic research—they had a separate lab which was really a basic research arm—and then he moved over into Roche's biotech group. He had made that transition or was in the middle of that transition within Roche, a very good company. Having the appreciation and the downstream experience and the ability to respect the downstream people as much as you would respect the discovery people, that's all part of the growth of a biotech company. [Pat] joined us and stayed with us until the very end, became ultimately number two in the company. Then when I retired, within weeks of the acquisition by AHP, or Wyeth, as it's called now, Pat became the head of <T: 35 min> the GI division of Wyeth, so he became president. The company was operated pretty much autonomously for about a year and a half, and then Wyeth started to integrate it. Then Pat became head of research and development for all of Wyeth. He stayed on for I think about five years or so, and then he retired. Pat would be a very important person for you to interview because he oversaw the science and the technology from the point on when we transformed ourselves from a research boutique, kind of, an operation into a real operational company.

JONES: Right. Well, let me ask . . . yeah, it's important. We'll talk to Pat. I look forward to that. At that point, where you make this, sort of, transition in the company, and by that time, Mark Ptashne had, sort of, withdrawn from the directing the science, but Tom Maniatis had stayed involved?

SCHMERGEL: Right. Right. [. . .] So, I mean, again, this is, kind of, like known. I'm not talking behind anybody's back. I sometimes think of Mark as almost like a [Wolfgang Amadeus] Mozart kind of a person. Like, Amadeus Mozart, like almost like a spoiled child.

JONES: But a genius. Yep.

SCHMERGEL: A genius, brilliant, spoiled, loses interest very quickly in stuff. Can be very inconsiderate of people. Shoots from the hip, etc., etc., but is a genius. So he started to lose interest in the company gradually. We actually were unhappy about that because the guy could come in, and in four or five hours would have some brilliant insights. If he doesn't show up, we're not going to get benefit of that insight. He started to lose interest. He always was very talented, playing the violin, and then having GI start allowed him to purchase this one million

plus violin, and he would spend more and more time on his music. He would spend more and more time traveling and enjoying life.

JONES: And still pursuing science in the lab at Harvard, yes?

SCHMERGEL: He is still doing some, but less and less. I mean, if you look at his production rate of his publications in the lab, going back, it was going down. Mark is a ladies' man, always was. He's married, but he was always a ladies' man while he was single. Then also, he just said, "I lose . . . gradually lose interest." He was, kind of, like gradually withdrawing. Then after we became . . . but even before we became public, he was making some private deals with the board's permission to sell some of his stock. That's how he bought this one-million-dollar violin. He was just drifting away. After a while, I realized that I could not motivate him. I could not motivate him to be more involved. I kind of let things take their own course. I let him drift away. That's what he was doing anyway, and I couldn't stop that.

Tom, on the other hand, if anything, got more involved, So actually from the standpoint of the company, and from my personal standpoint in doing the best job I can running the company, it, sort of, like balanced out. One guy is drifting away, but the other brilliant guy, who does not have . . . Tom does not have Mark's charisma. But in terms <T: 40 min> of the science, it's just as solid. Tom goes in-depth. If you need to spend two days on something, he'll spend it. Mark would spend a half an hour, and or he doesn't. I felt that this is a business . . . I was very happy with the way this turned out. Mark after a while got bored in the scientific advisory board, and he was [also] on the board of directors. One day he just said, "I'm not interested in these meetings or anything anymore anyway. Why don't I resign?" We gave him a nice party and all, and he resigned, and he, kind of, drifted away. We would actually not even see him after that at all. Tom, on the other hand, was always there, day and night, and Tom was also more beloved by the people because the personality is different. Tom is more people-oriented. I mean, Mark . . . I'm sure that you are familiar with Mark's reputation as such. I got along with Mark off and on better or worse, but I always had to keep telling myself this must be like trying to manage Mozart. And ultimately, you cannot do it, you know?

JONES: Yeah. Right.

SCHMERGEL: It doesn't work for the long run. It can work for the short run for a while.

JONES: Yeah. Can you—

SCHMERGEL: So it was okay at the end.

JONES: Yeah. Yeah. Can you pin down a date when he started to lose interest? Roughly what year that was?

SCHMERGEL: Yeah, okay. I would say that he started to lose interest after we went public. We went public in '86. So the company physically got going in early '81. That was about five years. So he probably . . . we got five years out of him. As I'm thinking out loud now about Mark, when we went public, then all of a sudden Mark became rich on paper, on paper, but he became rich. Mark comes from [a middle-class] family. I mean, more middle-class . . . just . . . not poor, but middle-class. I mean, I met his parents, lovely parents. Middle-class family. Until biotech, you know, molecular biologists never made any money.

Double "E"s [electrical engineers] made money consulting for Lockheed [Corporation] or Raytheon [Company] or whatever. Physicists made money. Molecular biology, biochemistry, the academic scientists, even if they got some consulting deals from pharmaceutical companies, they were paid peanuts—nothing. But biotech allowed then the founders or the founding group to become wealthy, especially when the company goes public. All of a sudden, Mark, on the day we went public—all this can be looked up—on paper, he's worth thirty million dollars or whatever. All of a sudden, right? Some number like that. Maybe more even. These numbers are all available. Even so, he couldn't really sell too much at any one time. He always needed board approval. It changed his perspective on life. Tom, now we are just talking here, but I would say this even if they're sitting in the room . . . Tom wasn't all that interested in money. Money is good, you know. Sure. But it's not a big deal. Tom kept living more or less the way he lived before. Mark started to enjoy life. It's fine. I mean there was nothing wrong with that. But it's just a different approach.

JONES: Right. Do you recall projects that particularly enthused Tom Maniatis along the way or projects that he made really important <T: 45 min> contributions to furthering, moving them along?

SCHMERGEL: Tom essentially made contributions to everything. He was truly the person that could review any project, so he was not the champion of any one thing, whether it's EPO or Factor VIII or the bone growth proteins. Tom was not the champion of any one thing, and usually, individual senior scientists who would have cloned it, or later on, then the challenge became expression. They would champion those projects. A couple of people became totally enamored and fell in love with the bone growth hormone, and that became their life for ten years. Tom would be essentially providing guidance to . . . he would be reviewing each project on a regular basis, obviously. But then also when things came up between the regular reviews people could and would go to Tom to get insights. Also, you see, Tom was non-threatening. A lab tech could go to Tom and discuss an issue where he or she was stuck on something, and say, "Look, Tom, I'm really having a problem here." Mark would be a lot more a threatening kind of

a person, much more aggressive. So people would be actually maybe more scared to go to Mark. You talk to them too, you can get some insights on that, too. Yeah?

JONES: Yeah. Very good.

SCHMERGEL: Again, it's just an issue of a personality and approach.

JONES: Right. Right. Now listen, it just came to me, the person at Greylock, was it Henry McCance?

SCHMERGEL: Henry McCance. Right.

JONES: Yeah. Okay. Good.

SCHMERGEL: Right. Right. But it was Henry who I actually first met. Henry came to Chicago—I was working in Chicago then—to visit one of his companies that he was on the board. I knew the CEO of that company, who was not a classmate of mine at the Harvard Business School. He was a year ahead of me. But he was a friend. This friend talked to Henry, or Henry might have mentioned to him, “We are looking for somebody. The investor group is looking for somebody.” Or my friend, whose name was [Wally Cornett] might have said to Henry, “Well, gee, if you ever want to meet an interesting entrepreneurially-oriented Baxter executive, meet Gabe Schmergel.” I wasn't there. So it was Henry. Now I remember, okay, I had like a cup of coffee with Henry, but then Henry said, “Try to come to Boston and meet Dan Gregory, who's working with Tony and Benno Schmidt on getting some structure into these, kind of, what at that time was a very general idea of Genetics Institute. It was a concept.

JONES: Right.

SCHMERGEL: Right. That was the exact sequence. Yeah.

JONES: Yeah. Well, let me ask you, along the way, from the early years, and then moving forward, Tony Evnin, Benno Schmidt, Dan Gregory, did they have a big impact in the company? They're all sitting on the board, correct?

SCHMERGEL: Right. They're all on the board. I was very lucky. Since then . . . we are now talking '81, right?

JONES: Yes.

SCHMERGEL: Okay. Since then, and after GI, I did a lot of angel investing and other things—probably invested in thirty companies myself—and was on some boards. Attended board meetings as an observer. I have seen a lot of boards since then. I have never seen such a collection of outstanding individuals. It was pure luck, maybe, I don't know. These were the old-line people with incredible ethical standards—Benno Schmidt, Tony Evnin, Dan Gregory, not at all like some of the sharks you see floating around now [in this business]. I mean, **<T: 50 min>** young guys who have never done anything in life and got an MBA a couple of years ago and think they have to make a big name in the next year or so. These guys took a long-term view on everything. The leader was Benno Schmidt. He's a legendary figure. I am personally [privileged] very to count him as one of two mentors I had in my life. One was Mr. Graham—Bill Graham at Baxter, the CEO. The other one is Benno Schmidt. He was the chairman, and enormous authority, informal authority. True leadership where people respect you and follow you. Benno was very bright, he passed away a few years ago. Maybe about ten years ago he passed away.

Very, very bright. Physically imposing, tall, good-looking man, physically imposing. Very quick on his feet. Had an ability to cut through all the fluff and confusion and usually get right to the heart of a problem. Now he was our chairman until maybe a year before the acquisition took place. By that time, then, he started to relinquish his responsibilities at JH Whitney, gradually. We had maybe six board meetings a year, but I would go and see Benno one-on-one in between board meetings almost as a clockwork, just one-on-one. I would go to New York, anyway, to visit investors. You can always go see . . . in biotech, you can always go to New York and make a day of it. I would have lunch with Benno in his private dining room at JH Whitney. He had a private dining room, which he would use if needed for one-on-one lunches. And then he would not let any of his other partners use it. He was the senior person at JH Whitney.

I would go and discuss, whether it's a people issue or some complicated negotiation. I mean, I wouldn't go to Benno with scientific problems, obviously. But complex issues, some of them having to do with strategic issues. How to do a deal with Baxter or Sandoz or Hoffmann-La Roche, or whoever. Very often, I would go, and I would, kind of, lay out . . . there were no PowerPoints or anything. You would not go to Benno with a PowerPoint. There weren't any PowerPoints, anyway, but he would kick you out. Everything had to be done informally. I wouldn't even look at notes because he would say, "Well, you better know all this stuff. You don't need any notes." I'd start to discuss the problem, and then after two minutes, Benno would say, "Well, are you going to recommend [option] B? You know this?"

I'd say, "Benno, of course." Well, he said, "Okay. All right. So let's just focus in on that." He would have that ability that I have not seen in anybody else to that extent of just getting to the heart of an issue and essentially get to the essentials. Then we would have a very open discussion, very open discussion about it, and I could talk to him about complicated personal issues, interrelationships, that I was trying to manage. He'd say, "Well, this is how you maybe handle Mark or Bob Kamen." Once we were dealing with some real problems, and I said, "Well, Benno, am I retaining your confidence?"

He looked at me, and he said, "Gabe, absolutely. If I lose confidence in you, you'll be the first one to know, and then very quickly, we will resolve that issue, or you'll be <T: 55 min> gone." [laughter] He said, "Never worry about me. If there's a problem that I have with you, I'm going to just come right out and tell you about it, and then we'll either sort it out or we don't."

JONES: Right. Very straightforward.

SCHMERGEL: But that's the style he had, you know, straightforward, blunt, get to the point, no bullshit. I was very lucky with him. Tony was, kind of, like the number two guy on the board. After Benno left the board the last year or—Tony became the chairman. But Tony was all along, kind of, like the number two guy. Many of the same personal characteristics as Benno, but much more low key. Much more low key. Benno was very dynamic, could be very aggressive if he needed to be. Dan Gregory left the board. He was the first one to leave the board from the three when Bill [William F.] Weld became governor here in Massachusetts, and the year could be looked up. I forget the year.

JONES: Sure.

SCHMERGEL: Bill Weld asked Dan Gregory to become his Secretary of Commerce. Dan did that for a year or two but was very frustrated in state government. [laughter] Can you imagine? So he only lasted in the job for a couple of years, and then he went back to Greylock full-time. The board, as I said, I was very lucky with the board. We had some other board members. We had Bill Paley as an individual investor, not with CBS [Columbia Broadcasting Company], but as an individual investor. Obviously, Bill Paley was a legendary figure. But he was no longer in his prime at that time. He was also not on familiar territory, right?

JONES: Right.

SCHMERGEL: But he was individually very interested in biotechnology. His wife had passed away from cancer, and Paley, sort of, felt conceptually that biotechnology is going to be

important in curing cancer. We now know that is turning out to be much more long-term and much more difficult. It may never get accomplished. Some progress has been made. Paley put in . . . I forget the exact portion of the first six million. It must have been at least a million. As I think back, that was, kind of, the initial board.

JONES: Well, listen, I would like to ask you more about the board in relation to managing the patent disputes with Amgen and so on, but let's not go there yet. I would also like to ask you mentioned Bill Graham as a mentor, and in the beginning, he was one of the first . . . you went to him first, to help fund the Factor VIII research, right?

SCHMERGEL: Oh, we went . . . I went to Baxter . . . by that time, Bill Graham was the CEO of Baxter from very early days, he was probably CEO for about twenty-five, thirty years. In early 1980, or late '79 or early 1980, Vern [Vernon R.] Loucks [Jr.] became the CEO of Baxter. Vernon Loucks. And then Vern stayed as CEO probably for about fifteen years before he retired. By the time I left Baxter in early 1981, Vern Loucks had been the CEO for approximately a year, maybe a little bit longer. One of the executive vice presidents was Bill Gantz, who had been my boss. Bill Gantz had run the international business before I, and then when he moved up, I moved up to take his job. Before this, I was running Baxter Europe. I actually went back to Baxter for funding, both for <T: 60 min> equity funding and for offering Baxter the opportunity to fund the Factor VIII project. I went back, and I told initially to Bill Gantz, who had been my previous boss, and then through Bill, to Vern Loucks. I do remember stopping by, and Mr. Graham had stayed on as chairman of the board, and it was no longer a full-time position. I remember going in and paying my respects to him, and sharing with him, but the decision-making for these kinds of deals [was with others now]. Graham was still the éminence grise behind the scenes there. But for these kinds of things, it was Bill Gantz and Vern Loucks.

JONES: Was it difficult to persuade them that this was a good bet? Or was it the kind of thing that Baxter's big enough, they could afford to take a chance on this in case it turned into something really good?

SCHMERGEL: Well, I tell you it's a very good question. Baxter previously . . . while I was still at Baxter, Baxter had discussions with Genentech about Factor VIII. Now I was not involved in the discussions. I was not sitting in on these meetings because I had an operational job. This was all done by corporate research and the central office. I was running around Europe and Japan and God knows where running the international business. But I was generally aware of a number of meetings that took place, discussions that took place, and Baxter declined. So now we are back in '79 or whatever—I forget the exact date—that I'm generally aware that Baxter is having some discussions with Genentech about Factor VIII, which impacted my business—naturally, the biological Factor VIII manufactured from human blood plasma. So I

have to be aware of that, but Baxter turned it down, turned down the opportunity to work with Genentech because Baxter felt that the project is very long shot, has no chance of succeeding.

Then I went back to Baxter and said, “Look, we, Genetics Institute . . . “ We had fifty people, right? “We have a Factor VIII project, and we know what to do. Okay, fellows . . .” I say it respectfully. I had been involved in—not I had been involved—I had been running the international hemophilia business. I know the business. I know about the protein, as it occurs naturally, so to speak. I’m, kind of, oversimplifying. I know what we are doing. I am getting this world-class scientific team, whether the full-time people like Jay Toole, obviously using the name of Mark and Tom, who were so big that even Baxter knew of them by reputation. By reputation. So I said, “I am putting together here a technological [and] scientific team that can solve these problems. I understand the business. Do I have a deal for you guys? You can pay for all of the costs.” I’m, kind of, oversimplifying it.

“We don’t really know what the costs will be. So we’ll come each year with a budget. We’ll justify the budget. You guys fund the budget. We’ll agree on a budget.” I couldn’t really specify what the budget should be because frankly, I had no idea. Nobody had any idea how much it would cost. It ended up costing a hell of a lot more than . . . if I had a fixed number, we would have been in deep trouble. I mean, just the research support over ten years was like [many tens of] millions of dollars not to speak about manufacturing support and everything else. I mean, it was incredibly expensive, okay? But it was an annual budget, kind of, approval. They said, “Well, we ought to [be in manufacturing it also].” <T: 65 min>

“You guys want two sources of manufacturing anyway, so you guys don’t know about recombinant manufacturing.” Neither did we, by the way. We had no manufacturing facility. Let’s have shared manufacturing rights, fifty-fifty. Let’s have these royalties. Fairly low royalty, but the manufacturing rights gave us the potential to earn real good money on the project.

“You guys have worldwide [marketing] rights This is a great deal for you.”

I also said, “And, by the way, our equity base—” [laughter] “Our equity base needs to be expanded because we want to invest more in equipment, in hiring people, etc., etc. Would you like to buy 9.9 percent of the company for ten million? Of course, we don’t want you to have a board seat, because we don’t want any corporations on our board. But you guys don’t need any board seat because you guys know me.” [laughter]

“You know I’m a good guy, and you guys can call me any time, at home, wherever, you know, anything you want to know.” We were privately held, and so I didn’t even have public or [shareholders]. “You call me, and you want me to come to Chicago and talk to me about something, you call me, and I’ll be in Chicago on the next plane. If you guys want to visit us, we’ll show you the labs, and you can talk to the scientists.” “So don’t I have a deal for you?”

Baxter was smart enough, and they said, “Well, why don’t we take a chance on this?” They did. Bill Gantz in particular, who was my boss at Baxter for a large part of my career—I was at Baxter for about fourteen years, and he was my direct boss, always a step ahead of me,

he was a couple of years older than I am—in particular trusted me. They took a chance, and it worked out well for them, and it worked out well for GI and worked out for the patients. Which is probably the most important thing. So was it difficult? Yes. But was it incredibly difficult? No, because they knew me. They figured, well, if they're going to take a chance on something, they might as well take a chance with somebody they know.

JONES: Right. And at that time, you were Sandoz was also in early. Was that a personal connection, too?

SCHMERGEL: The Sandoz connection wasn't that much a personal connection. I knew a couple of people at Sandoz, again, from my Baxter days, who then introduced me to some of the higher ups. I was very friendly with the head of the Swiss Red Cross from my Baxter days when I dealt with them.

JONES: Right. Right, right.

SCHMERGEL: Right? The Swiss Red Cross was, of course, very close to Sandoz. So in Baxter, we were selling hemophilia products, we were selling blood packs, manufacturing and selling blood packs. The Swiss Red Cross was a huge customer. Basically, I got the head of the Swiss Red Cross to introduce me to Sandoz. We had this lymphokine program, M . . . GM-CSF. The first molecule was GM-CSF, then later M-CSF, and then IL-11 and IL-3. The lymphokine program was viewed at that time as an incredibly high-risk area. It was like molecules looking for . . . molecules that a lot of people cloned and wanted to clone figuring that they will do something.

JONES: They didn't know what.

SCHMERGEL: They didn't know what, right. As it turned out, the only real lymphokine that ever amounted to anything was G-CSF.

JONES: And that was a big one, though.

SCHMERGEL: That was a big one. Amgen went after G. <T: 70 min> We went after GM. And I remember George Rathmann wanted to go after GM because he and I were competing in dealing with an academic scientist to get GM—Dr. David Golde. Golde knew Tom Maniatis and really liked him, and Golde decided to go with us. We got GM, and Amgen had to go to the second choice, to another scientist, to get G. It turned out GM never amounted to much. It's a

product, but I don't know—fifty or a hundred million sales. Even today, it's basically nothing. G became a very big product. It also tells you how much luck plays a role.

The fundamental issue was we had this lymphokine program, and everybody was really interested in it—our scientists, Mark, and Tom, and I, too. But it was basically, okay, let's clone these proteins and see what they do. As opposed to EPO, where it was clear, let's clone EPO, get it expressed it will increase, fairly simply, the red blood cell count. Just go through one or two steps from . . . the mechanism of action is very simple. Like Factor VIII, you get Factor VIII, it's missing in the blood of hemophiliacs, you have a product. Factor IX, hemophilia B. Bone growth hormones, you've got these multiple fractures, the cancer or cure, whatever, eats away the bone. If you can help bone to grow back quickly, you have a product. That was clear. The lymphokines, I would keep talking to people, to Golde, to other people, to my own people, what the hell will these things do.

It was very vague. Maybe it will do this, maybe it will do that. I was very happy to share the costs and the risks of the lymphokine program with somebody who would afford it. As opposed to let's say Factor VIII, where I wanted a big piece of the pie because I knew exactly what it would do, if we succeeded in cloning it, expressing it, and then manufacturing it at a reasonable cost. We had then these pretty comprehensive deals with Sandoz, which, again, financed the lymphokine program. But ultimately for us the benefit there turned out to be to build up our technological and scientific base. We did not get—even down the road—we did not get any ultimate financial benefit from it. As I said, the only thing that really benefits patients from our products in a very minor way is GM. I forget the brand number under which it's—but I know it's a very small product.

JONES: Yeah. And the technological benefits, it was just generally working with different molecules, and . . .

SCHMERGEL: Yeah. Yeah. I mean, you build up your technology base. You build up. After a while, these things become more routine. You get your technicians trained, your scientists trained, so that . . . there's a learning curve there, and you become highly efficient, and you can then crank through stuff very quickly and cost efficiently.

JONES: Right. Yeah. Was it your policy not to have Sandoz . . . you have this arrangement with Sandoz, but they didn't put anybody on the board. I mean, this is—

SCHMERGEL: No.

JONES: Mostly a research thing, not a—

SCHMERGEL: Right.

JONES: Yeah.

SCHMERGEL: Right.

JONES: But it was a formal policy not to have corporations on the board? And is that something you maintained?

SCHMERGEL: We maintained it until 1991 or so when American Home Products put in seven hundred million dollars.

JONES: Yeah. Hard to keep—

SCHMERGEL: In the company, which was at that time the second largest investment. The largest investment a corporation ever made in a biotech company was Roche into Genentech. I think that was like 1.2 billion or <T: 75 min> something. This can be looked up. You probably know it. I forget. The second largest investment at that time was seven hundred million dollars, and for seven hundred million dollars, we had to give them two board seats. [laughter] That was the first time a corporation came on our board.

JONES: I see.

SCHMERGEL: And also the last time, because five years later, they bought us.

JONES: Right. Okay. Can I ask you about the EPO project and the competition with Amgen that developed? Because this is hugely important, right?

SCHMERGEL: Right. Right. Right.

JONES: So how—

SCHMERGEL: So we . . . yeah?

JONES: Yeah. How did it begin? EPO was one of the first molecules that you identified as something to pursue, correct?

SCHMERGEL: Right. Right. Right. Actually, we identified it as a potential target essentially at the same time as Amgen, I mean, give or take maybe a few months, one way or another. Both of us started to work on it. Neither of us knew . . . others were working on it, too. I know Biogen was going after it at that time, Genentech also. But both Amgen and we put a lot of priority on it. Neither of us realized how big this product would ever become. Even if you look at early research reports by outside biotech analysts, very early market estimates are a small fraction of what the market turned out to be.

JONES: Yeah. Looking back, how did they get it so wrong?

SCHMERGEL: Yeah, that's a good question. This has happened with a number of biotech products. This has happened with the main product of Genzyme—Ceredase—which was originally viewed as a forty-million-dollar product. When Henri [Termeer] first decided to go after that project, it was viewed as approximately forty—million global market.⁵ And then—

JONES: Well, there's a pricing issue there, though, right? I mean—

SCHMERGEL: There's definitely a pricing issue, but also maybe patients also on a global basis came out of the woodwork, right?

JONES: Yeah. Yeah.

SCHMERGEL: Before, they couldn't be treated. They just ultimately died a slow and lingering, essentially death, because ultimately, it's a huge problem. And, well—

JONES: Well, we don't have to answer the question. It's just interesting—

⁵ Henri Termeer, interview by Ted Everson and Arnold Thackray, Cambridge, Massachusetts, 23 May 2006, 7 December 2006, 2 August 2007, 18 December 2008, and 30 September 2011 (Philadelphia: Science History Institute, Oral History Transcript # 0342).

SCHMERGEL: You know, I don't think . . . it's an interesting question. Yes. Yes. I am out on the West Coast, based on Tom telling me, "Go see David Golde, please, because—"

JONES: He's at UCLA [University of California, Los Angeles]? Is that right?

SCHMERGEL: Yes. Yes. At UCLA. But David has unfortunately passed away. I think about ten years ago. Otherwise, he would be a great person to talk to you. But David was on our scientific advisory board for many, many years—brilliant guy, MD. Provided a lot of insights into the medical applications of potential molecules. David believed in EPO. One of the early scientists that Mark and Tom recruited was Rodney [M.] Hewick, who was out there working for—name blocked there—famous scientist who . . . it will come to me. It will come to me. Rod Hewick had already then committed to join the company eventually, but he was finishing things up there. Rod was involved with the development of EPO in academia there at Caltech [California Institute of Technology], at Caltech. The name of the scientist, world-famous guy.

JONES: Yeah. I'll try to find it. Yeah.

SCHMERGEL: Yeah. Okay. Actually, on EPO, I mean, you can get the . . . you can even get, you know, <T: 80 min> you can write a whole book just on EPO. Somebody probably should. Then we bring Rod to Boston, and he's ready to live there and go to work. A couple of the molecular biologists are put in trying to clone the product. Meanwhile, Amgen is doing that also. As it now turns out, from various lawsuits, Amgen—I'm going to use the term "presumably"—cloned the molecule first. But we purified EPO and identified it as a substance. I'm not talking legal terms. Tens of millions of dollars were at stake on the patent. But we were the first ones to essentially purify and isolate the substance. And the major issue, what it came down to here in the United States, was what is more important? They cloned it first—okay?—and they could prove that, and we isolated the substance and characterized it first. In federal court, the ruling was that both the Amgen patent that was issued and the GI patent that was issued are valid. That was a very significant decision at the federal court level. That then implied cross-licensing. Amgen, we tried . . . and I spent a year of my life trying to negotiate with Amgen. They ended up going to J&J [Johnson and Johnson]. We had partners in Japan, Chugai [Pharmaceutical Company Limited]. In Europe, Boehringer Mannheim. In the US, Chugai brought in Upjohn. There were all these partners involved. I am trying to negotiate a cross-license. Meanwhile, Amgen and J&J, in good faith, and I was dealing with George Rathmann. I was meeting with the CEO of J&J. It was a process.

JONES: Right. As this is developing, it's basically what you're hoping for, what you think is the case is that basically you've tied?

SCHMERGEL: Yes. Yes.

JONES: And going after it, and then you should split the market up?

SCHMERGEL: Yes.

JONES: Yeah.

SCHMERGEL: That's right. [. . .] So our view was, okay, they have a patent; we have a patent. It's been upheld in federal court. The market will decide who buys what from whom. Okay. Now both Amgen and we had appealed. Amgen appealed, and we appealed a day later because we thought that they would appeal, so we had our appeal all drafted, but we sent it in just a day after they made the appeal because we wanted to essentially say, "Hey, we want to make a deal with you guys." But they appealed to get rid of our patent, to declare it invalid. Then we immediately appealed to have their patent to be declared invalid. The case then went to the CAFC [Court of Appeals for the Federal Circuit], which is the highest court that deals exclusively with patents. As you know the Supreme Court very rarely deals with patents. The CAFC is an appeals court which deals with patents. We lost in the US, and then that meant we could not come on the market in the US.

JONES: Now when you say lost—

SCHMERGEL: Our patent was thrown out, declared invalid.

JONES: Yeah. Okay. Right.

SCHMERGEL: And there's a whole book . . . this has been taught in law schools—the patent case.

JONES: Yes. Right.

SCHMERGEL: It's very complicated. If you want to go into that, I will have you talk to the people who full-time spent ten years of their lives on these. Outside the US, in almost every single country, and in all significant countries, whether in . . . marketplaces, whether in Japan or Germany, whatever, both patents were upheld. The same thing went on outside the US. They

<T: 85 min> petitioned, patents were both issued, and then both parties appealed, or patents were issued, and neither party appealed, like in Japan, where a cross-license took place between Amgen's licensee, Kirin [Company], and our licensee, Chugai. Outside the US, in every single important market, and virtually in all countries in the world, both patents were upheld, and cross-licensing took place between Amgen's overseas partners and our overseas partners. Both products—so now we are talking first generation EPO—both products were on the market. In some cases, their licensee did a better job—60/40 or whatever market share. In some cases, our licensee. It depended on the country. In Japan, it was very simple. Both patents were issued by the Japanese patent office. The Ministry of Health essentially said, “We have to approve reimbursement rates for the product.” The Ministry of Health called in both their Japanese partner CEO and ours, and they discussed this. I'm oversimplifying this. I have been told this by the CEO. The Ministry of Health said, “Look, we want two suppliers anyway. We don't really understand and care about the subtleties that these stupid idiots in the US are fighting on. What is more important. This is all bullshit. We want two suppliers anyway. You guys have one week to cross-license, or you're going to be very sorry when it comes to reimbursement.” The reason I know, the CEO calls me and says, “Look, we want to cross-license because it has to be a Japanese cross-license, and this is what we are talking about in general terms, and, Gabe, if I can make a cross-license—” Because it impacted our royalty, too, right?

JONES: Yeah. This is George Rathmann you're talking to?

SCHMERGEL: No, no. No, no. I'm talking about our Japanese partner.

JONES: Oh, right. Okay. Right. Yeah. Okay. Your partner.

SCHMERGEL: Yes. He's saying, we are talking to Kirin, who is Amgen's Japanese partner. This was a Japanese deal.

JONES: I see. Okay.

SCHMERGEL: Right? But whatever deal they make has an impact just through the contract—two-hundred-page contract or whatever—had some impact on ours. He basically said, “This is the kind of deal we can make. What do you think about it?”

I remember saying, “Well, okay I'm going to put my financial people to analyze the implications, all right?” He said, “Okay.” He said, “Tell me tomorrow morning.” He said, “I've got a week.” [laughter]

I remember calling in my financial guys. I said, “Okay, guys, let’s run some quick calculations on the back of the envelope.” The next day since there was no email, there was fax . . . I’m sure I called rather than faxed, not wanting anything on paper. I said, “Mr. Yamamoto, this is what we think. It’s quite acceptable to us, and we be most honored and very happy if you can make a deal like that.” They made a deal within a week. They cross-licensed. Both products were on the market immediately, which is ultimately what you want to do in any case—get products into the hands of the patients. That’s the Japanese way of doing business.

JONES: Right.

SCHMERGEL: And in Europe, I think we just settled finally a few years ago in some countries.

JONES: But in the meantime—

SCHMERGEL: Everywhere—

JONES: In the meantime, you were on the market in Europe?

SCHMERGEL: In the meantime, we were on the market, yes. In the US, the FDA was awaiting the decision of the appeals court because it was almost like parallel. In Europe, the products were on the market, and they just settled out to the extent it’s not fifty-fifty. If it’s like 55/45, or whatever, you just settle the numbers out, and you send a check to the other party. Yes. The product really was not held up anywhere in terms of getting on the market. In the US, it was held up because I do remember clearly that the FDA had essentially got to the **<T: 90 min>** point where they were ready to approve both products, but they wanted to see what the federal appeals court decides. Everybody also knew that’s coming out within a few months. The FDA was not really delaying things too much either, maybe just by a few months.

JONES: I see. So you were bringing in substantial revenues around the world with this product?

SCHMERGEL: Yes. Yes. Well, yes. Yes. Yeah.

JONES: But the US market was huge, and Amgen—

SCHMERGEL: Yes. The US market at that time, also, the US market at that time, like the investment community looked more at the US market still. We were going to manufacture for the US, and it was a huge cash flow for us. Then it turned out we couldn't come on the US market. And the decision came out, that very day, our stock dropped I remember from sixty-two dollars, it dropped into the mid to low twenties and ended up like in the high twenties. We basically got over 50 percent of our market value knocked out and a tremendous loss in . . . a tremendous psychological loss, tremendous loss also in terms of prestige, which is very important. In a business like that, where you are still marketing a promise as opposed to in those days, '91, you were still marketing to the investors a promise to some extent—some reality, a mixture of reality and promise, more than maybe in a normal business. It was a huge blow to the company. It shut off our access to Wall Street. That was, kind of, like the low point in GI's history. It was the low point of my professional career. [laughter]

JONES: Was it really? That's how it felt to you at that time, yeah? That this is—

SCHMERGEL: I'm sorry?

JONES: That's how it felt to you at the time, that this was really the worst—

SCHMERGEL: Oh absolutely. I mean, truly, yeah, I mean, I was devastated because we figured that there is an 85 percent chance that both patents will be upheld at the level of the appeals court. We had in our in-house patent lawyers, we had outside patent lawyers, obviously. We had patent litigators. Chugai had their own people too, but for the US, they had hired a different law firm. Upjohn had a law firm. We had five different sets of professional opinions from patent law firms, and, kind of, combining them, I felt—and the board felt—that we had an 85 percent chance of having both patents to be upheld. At the same time when you have an 85 percent chance, you, sort of, feel pretty good about that, right? At the same time, I also knew that there's a 15 percent chance it would not be upheld. In the back of my mind it was also, "What do we do if it's not upheld?" We were planning for success, success being our patent being upheld. We weren't planning for failure. We were planning for success. But—

JONES: In practical terms, I mean, were you expanding manufacturing, or getting prepared—

SCHMERGEL: Yes. Yes. We were. You see, because we had to. Because then if the patent is upheld and we are not ready—right?—if the lead times in manufacturing and everything . . . yeah. If everybody had said, "Look, it's fifty-fifty." Then it would have been a different story. But we had to be ready. We had to be ready for our corporate partners. The contracts called for performance measures. With an 85 percent chance that everybody agreed was, kind of, a

ballpark number. You have to plan for success, okay? That's what we did. When the thing blew up, <T: 95 min> then we had to figure out what we do. I taught a case at MIT on this at the MIT Sloan School. Now—

JONES: Has that been published? Maybe we can track that down.

SCHMERGEL: I don't know if it's on the MIT website or not. I taught it for about ten years, and now that I'm in Florida, I can't come up for that just to teach a class. But we can separately talk about this if you are interested. What we concluded . . . I'll give you the bottom line, which is we felt at that time that fundamentally, we can do two things. One is to significantly cut the company back to bring revenues and expenses more or less in line, more or less. Tough it out until the next product comes out, the next major product comes out.

JONES: Were you confident that you had something good in the pipeline?

SCHMERGEL: Yeah, we did. Yeah. We had three or four other things going. But then you don't know the timelines, and we felt that we would have to cut not only fat, but muscle. You can cut like ten percent fat out in any organization any time, and life goes on. But we would have had to make serious cuts. Clearly, we felt that our crown jewel was discovery research. If you make major . . . and that's the longer-term things are the highest risk, but that's our crown jewel. If we make major cuts into our discovery research, we can undermine the long-term value of the company very significantly. Or we can look for a very major corporate investment. And there was then of course already a template there. When tPA failed, they went to Roche. Roche came to them. So a template existed. A template existed. We were a lot smaller than Genentech. But could we essentially duplicate something like that, giving up as little as we can possibly get away with and get the maximum amount of money into the company? I also had then a shareholder base that was really pissed off, as you can imagine. I mean, really. Major institutions. I mean, so it was really like our own 9/11.

JONES: Yeah. How was that on you personally? I mean, having—

SCHMERGEL: Very bad. I mean, very bad. Very bad. But I had to just say, "Okay I'm going to make a stand and fight—fight for the company, fight for my job, and just have to get through that." Meanwhile, try to negotiate for some money. I'm talking to a number of companies—I'm really kind of compressing it—talking to a number of companies. I knew Fred Hassan from before. Fred was at that time running the pharmaceutical business of AHP. They had other businesses, household products and whatever, which they eventually got rid of. He was, sort of, the number two operational guy, and the number one guy was Stafford, the CEO. The number two guy in some ways, in terms of power, was Bob [Robert G.] Blount, the CFO. A very

powerful CFO. [Bob had] kind of an undue influence, and [Fred] was number three, running the pharmaceutical business. He should have been number two, but he was number three. AHP was so financially oriented that the CFO, who was also personally very close to the CEO, was an unusually informally powerful guy. Fred and I started to talk. Fred was the one who called me. I remember he said, “Look, I’m passing through Boston on my way somewhere. Let’s meet at the airport.” That was our first meeting for maybe an hour between planes. He said, “Would you guys be amenable to a very major corporate investment?” I said, “Fred, we are looking for money, <T: 100 min> but we are looking for many, many hundreds of millions of dollars because that’s the only thing that can really make a difference.”

He said, “Let me think. You think some more. Let’s meet again in a couple of weeks on my way to Europe or whatever,” he said. We started to talk. Tuan Ha-Ngoc, who [you] have interviewed or will interview, was my right-hand man on business at the time. He was helping me. We were working together then in talking to Fred. We were formulating our thinking. Fred was formulating his thinking. Ultimately, then, what turned out—and as I said, we need to speak about this separately for an hour or two—but the so-called AHP deal then ended up as a seven-hundred-million-dollar investment by them into GI, which essentially neutralized the loss of an EPO patent in the US. The price we paid was, however, this option that AHP had to buy the company five . . . well, they could have bought it earlier, but five years down the road at a significant premium, but it was their option. Like Roche had an option on Genentech.

Of course, I should say at some point in time we brought in Fred Frank as our investment banker, too.⁶ When the discussions got to the point, after a few informal meetings between Fred Hassan and I, and Tuan was with me at most of these meetings. At some point in time, we were a public company. It got to the point where we had to bring in an investment banker. But we would have wanted to bring him in anyway, even if we didn’t have to. We brought in Fred Frank, who was the key guy in the Genentech/Roche deal. Then Fred did his usual fantastic job in helping to structure and negotiate a deal that gave us . . . as I said, it neutralized the loss of EPO. In many ways, it was a fantastic deal, except that it did give AHP the right to buy the company at a prearranged price, which then two weeks before the option expired, they did.

JONES: Yeah. Now Fred had put together the Genentech/Roche deal and was able to structure that in a way where he thought Roche probably wouldn’t exercise the option when the contract expired, or when the option expired.

SCHMERGEL: Yeah. Right. Okay. Okay. Good point. Okay. The deal was structured very similarly. Roche made a decision that we had hoped that AHP would make also—not exercise, but create a situation where the shareholders are made happy, which they were, where it was the exercise and spinoff and buyback that whole story. AHP . . . Stafford refused to consider that

⁶ Frederick Frank, interview by Mark Jones on 25 May and 14 September 2011 and 16 August 2013 at Peter J. Solomon Company, New York, New York and via telephone (Philadelphia: Chemical Heritage Foundation, Oral History Transcript # 1005, in process).

because Stafford, against the advice of some of his own people, wanted control. Every executive is different. Stafford has many strengths, and I respect the man for a lot of what he accomplished. But he's very, very control-oriented. He likes to control as opposed to influence. Because here, influence was something that already as a shareholder they had. Influence can be structured and moderated and buffered and dealt with. Stafford wanted control. Stafford refused even to enter into any discussions, refused to even entertain any discussions where he would not get absolute control.

JONES: Okay. So you did have conversations with him personally, trying to talk about different possibilities for going forward? Yeah?

SCHMERGEL: Yeah, we raised the issue of "can we design a way?" The shareholders were interested in a financial return, and I have to respect that. <T: 105 min> I had incredible pressures on me, and fiduciary duty to respect that and to satisfy that. Once you are a public company, you can't play games, or you go to jail. You'll spend the rest of your life being sued. I had to respect that. From a standpoint of operational standpoint and what's best for my employees, and what I felt would be best for AHP, then is something where, yeah, they have influence, and we have some deals like Genentech had deals with Roche. Market all that stuff can be negotiated and structured and dealt with. But Stafford, as I said, in many ways an outstanding executive, in many ways a brilliant, very smart guy, but there's an enormous need for control. A lot of people worked for him, and they will tell you they respect the guy, but he wants to control everything. That drive, that need for control that Stafford had . . . see, his aim was noble. He knew that AHP lacked innovation, lacked creativity, the science wasn't all that productive. He knew all that. He had wanted to infuse some or most of the GI culture into AHP. He wanted to do that.

JONES: When you first started talking to AHP, was that part of the conversation, the—

SCHMERGEL: Yes.

JONES: Yeah?

SCHMERGEL: Yes. Yes. Yes. Off and on. I mean there were a lot of these conversations going on back and forth, over five years, while I had two AHP people on my board, Fred Hassan and Ben Canavan. Later when Ben retired from AHP, Bob Levy. But Stafford wanted control, again, and I kept saying nicely to them but also to myself, "If you guys have some control and influence, I will negotiate and work with. It's not a problem." For five years, there were no problems, really. We got along very well. As I said, some of Stafford's own people didn't want to buy us. They wanted [to keep the status quo]. Stafford wanted control. I felt that because

AHP was a strongly financially-oriented company. Because of Stafford's personality, and Blount at that time . . . Blount ended up retiring a few years later, but at that time, had such a strong influence. And so I thought that strong, strong control like that is not compatible with a ultimately positive outcome and productivity, etc., etc. We said, "If you want control, you have to buy, and pay for that control, pay the control premium." Stafford said, "That's the way I want to make the deal, so I have control."

Then I myself said that at that time, "In that case, I think the best thing is that I also then—if you make the acquisition—I retire because I personally find that wrong for me personally."

Then he said, "Well we'd like to sign you to a long-term deal, personally consult part-time. [. . .] How many years do you want?" I said, "Zero years." They said, "How about three years?"

"Zero years." I agreed to stay for two months, just to help with the transition. Because I said control, as opposed to . . . I said the following. I'm not sure this should be in the official papers. I said the following to one of his top guys, who was actually, kind of, a personal friend, not to Fred Hassan, I said, "I will agree that Jack Stafford is the King of England, if I am the Viceroy of India." [laughter]

JONES: Which is essentially what you had for five . . . or something like that for five years.

SCHMERGEL: Yes. Yeah. Right. Right. Right. I said, "If you can <T: 110 min> kind of talk this over with Jack, and if this concept . . . if this can be somehow . . ." I said, "I'll stay on." I said, "It's fine. It's going to be really fun for me personally." Then this guy came back to me after two months, and he said to me, "I talked to Jack." And he said, "We don't have any viceroys of India here." Yeah. [laughter] "He said, 'We have employees.'"

I said, "You understand that at this point in my life, after what I've accomplished, made some money, I'm really not interested in being an employee. If there's some kind of flexible deal that can be worked out, fine."

But he said, "No." He said, "There's no such thing. Jack wants absolute control, and if this is unacceptable to you, you're better off retiring." Then after that, I wasn't even interested in consulting. What the hell, you know?

JONES: Right. And it's rare that . . . actually that that works out in a . . . usually, people don't stick around, right?

SCHMERGEL: Right. [. . .] But I had a lot of loyalty to my own people. I had a lot of loyalty to Fred Hassan, whom I really liked. I got along well with Bob Levy. I got along very well with

Ben Canavan, who was at one time number two president of AHP. [Ben was a] very nice guy, started off in life as a semi-professional soccer player. Got along very well with all these people. I did not get along well with Bob Blount, who nobody got along well with. Stafford just wanted me personally on a very tight leash. I said, "The hell with that." Personally, I don't need that. I was fifty-six. I felt I could do anything. I didn't need that. I just didn't need that. I'm willing to deal with people, and compromise. Mark and Tom, it was not easy. Mark, certainly not, you know. Deal with high ego people. When somebody says, "My aim is to control the company and to control you," then I just go home, you know?

JONES: Right. So that was a difficult . . . let me back up just a little bit. Going through the Amgen thing that, sort of, led into this, was it difficult dealing with George Rathmann? Did you feel like he was . . . I don't know if . . . did you have discussions with him? Any insight into what was driving Amgen's . . . ?

SCHMERGEL: Yeah. Yeah. Yeah. George is a very emotional guy, very emotional guy. I knew him at Abbott [Laboratories]. I met him initially when he was running the diagnostic R&D at Abbott, which was also based in [Chicago], so I knew the guy, and I knew him all along through the IBA [Industrial Biotechnology Association]. At one time, I was president of IBA, which is now called BIO [Biotechnology Innovation Organization], right? George felt a very strong sense that we were the interloper. They cloned first. Once that was upheld . . . well, even the federal district court gave them the cloning patent. It just gave us another patent. You can use the term purification patent. George felt that the important thing was the cloning, and that morally, he put himself [above us], and I don't blame him, by the way. If it was the reverse, I might have felt the same way. But he says, "We were the first to clone, period. And therefore, it's our product, and you and everybody else should stay the hell out of it." [. . .]

JONES: This is about how they got to the cloning, right?

SCHMERGEL: Yes, there's <T: 115 min> some questions that maybe it was not 100 percent kosher. That the University of Chicago had certain rights that were not observed and acknowledged. In these academic things, I will always just go to the university, and I say to them, "Let's make a deal. You guys have this cell line or whatever. Let's make a deal." Rather than get into misappropriation of intellectual property. But be it as it may, George did feel that what they did was the important stuff, and what we did was secondary. His hands were also tied because he had a very complex licensing agreement with J&J. He did not . . . and he hated J&J even more than he hated us if you can believe that. He will tell me that. He'll say, "Gabe, I don't like those guys . . ." Not personally, but you know?

"I like you, Gabe, but I hate what you are doing." He will say, "I hate J&J. They are bastards. They are trying to undermine us." Etc., etc. It was a very complex. But his hands were also tied. J&J's hands were also tied because they had the deal with Amgen. Everybody would

have had to agree, and ultimately, I could have brought Chugai and Boehringer Mannheim [to the table], that I was very friendly with the top people, very friendly personally. I could have brought them into a deal. I had incredible confidence. Tuan, who is a master, master negotiator. I don't know. Have you met him yet?

JONES: I haven't. No.

SCHMERGEL: He's a unique person. He has incredible personal relationships in these companies. We, kind of, felt we can bring our licensees onto the ballpark and get everybody to sit down. But ultimately between J&J pursuing their own interests, Amgen pursuing theirs, us pursuing our interests, and that emotional feeling from George that they cloned first, so it's theirs. So—

JONES: It's an impossible situation in some respects. Yeah.

SCHMERGEL: It was. It ultimately . . . it was not possible.

JONES: Very good. Well, Gabe, listen, we've been talking for over two hours. That's a long time.

SCHMERGEL: Yes. I know. I know.

JONES: Why don't we break here and then—

SCHMERGEL: You absorb all that. But I am available to you. I just resigned from my . . . retired from my last board at Perkin Elmer [Inc.] a few months ago. I don't have anything to do, okay? [laughter] Which is what I want. Which is what I want. But I'm certainly very interested in this project. I want the story to be told, you know, accurately. That's my personal interest.

JONES: We will come back to you. When we write up the chapter on Genetics Institute, and what we'll follow the history of the company from the beginning over time through actually several chapters in the book, and we're doing that with the main companies: Genentech, Amgen, Genzyme. But what I would like you to do, if you're willing, is when we have this composed, if you would read and just look over what we've written to make sure that we have everything—

SCHMERGEL: Absolutely.

JONES: Yeah, that would be—

SCHMERGEL: Absolutely. No, absolutely. Also, if you want to set up another couple of hours to talk about stuff, send me an email, and between my tennis game and babysitting for my new grandson, I will devote as much time as you need. [laughter]

JONES: Okay. Great. Great. Thank you, Gabe. I look forward at some point to being able to meet you in person maybe when we get back to the East Coast one of these times.

SCHMERGEL: Yes. Yes. I mentioned—I don't know if you were on the phone then or—I am actually right now here in Boston, essentially babysitting with my wife most of the time our new grandson until October 26. Then October 26 we already are potentially booked to fly down to Sarasota, [Florida], which is where we live. And then we will stay—well, we stay there [in] Sarasota <T: 120 min> between November and the end of May. We will be coming to San Francisco, [California].

JONES: Oh, great.

SCHMERGEL: From time to time because our daughter and her whole family have just moved a few weeks ago to Las Altos, [California].

JONES: Oh, great.

SCHMERGEL: From Cincinnati, [Ohio], because of her husband's jobs. They just moved. Yes. Probably haven't even unpacked yet. Yeah, so we'll be going there. Las Altos is essentially San Francisco, so . . .

JONES: Well, I hope they enjoy the move. It's a great . . . Cincinnati is a nice town, but the Bay Area is a wonderful place, so—

SCHMERGEL: Yes. Yes.

JONES: I hope they enjoy it.

SCHMERGEL: Yes. Yes.

JONES: Yeah, if you have an opportunity, when you come out, then stop in here and visit us. That would be wonderful.

SCHMERGEL: Absolutely. Absolutely. Absolutely.

JONES: Okay. Great. Thank you, Gabe, and thank you very much for the help making the contacts with the others.

SCHMERGEL: No problem. If you are having problem . . . now Jay Toole, he is very excited, and he said he'll come to your offices.

JONES: Yeah. Well, he's here in San Francisco. I already sent him an email, so he'll get back, and we'll schedule something.

SCHMERGEL: Yeah. Yeah.

JONES: Very good.

SCHMERGEL: Steve Clark, he has not yet answered my email. He retired, and he's spending most of his time in Europe.

JONES: Is he American?

SCHMERGEL: With his wife.

JONES: Or is his wife—

SCHMERGEL: He's an American, but he loves France, and he loves Italy. He retired. He went on after GI, he was head of research in another company called Aveo [Pharmaceuticals, Inc.], in fact, working with Tuan.

JONES: Oh, right, right.

SCHMERGEL: He retired I think about two years or more and basically is just spending most of his time in Europe. But I'm hoping to get him interested because Steve, again, is an incredibly interesting and critical guy, and he can provide additional perspectives, and tell you war stories of—

JONES: Yeah. No. Great. Great.

SCHMERGEL: Yeah.

JONES: Okay. Look forward to it.

SCHMERGEL: Okay.

JONES: Okay. Thank you, Gabe. Bye-bye.

SCHMERGEL: Bye-bye. Bye-bye.

[END OF AUDIO, FILE 2.1]

[END OF INTERVIEW]