# Ken Buechler

*Interview conducted by*

*Mark Jones, PhD*

*June 4, 1997*

San Diego Technology Archive

The Library
UC San Diego

## Ken Buechler

Dr. Kenneth F. Buechler, Ken, Ph.D. co-founded Biosite Incorporated (formerly, Biosite Diagnostics Inc.) and served as its President and Chief Scientific Officer since October 22, 2004. Dr. Buechler served as Senior Vice President of Research and Development at Biosite Incorporated from March 2003 to October 22, 2004; Vice President of Research and Development from April 2001 to March 2003; Vice President of Research from January 1994 to April 2001 and Director of Chemistry from April 1988 to January 1994. Prior to joining Biosite Diagnostics Inc., he served as a Senior Research Scientist of the Diagnostics Research and Development Group at Hybritech Incorporated, where he was responsible for new product development and was the transfer project leader for ICON® QSR CK-MB, a cardiac marker assay. In addition, Dr. Buechler was responsible for the design and synthesis of reagents for use in the first rapid, visual pregnancy test, the ICON® hCG test. He has been a Director of Biosite Inc. since June 2003, Sequenom Inc. since December 2009 and Quidel Corp. since November 2007. Dr. Buechler serves as a Director of Sotera Wireless, Inc. and Astute Medical Inc. He is a Co-Founder of Adnavance Technologies Inc. and served as its Director since April 2008 until April 2010. He is a Member of the American Chemical Society, the Biochemical Society, the International Federation of Clinical Chemistry and Laboratory Medicine and the American Association of Clinical Chemists. He is a Co-inventor of certain Biosite proprietary technologies, including the Triage® Drugs of Abuse Panel and the Triage® Meter Plus platform. Dr. Buechler holds a B.S. degree in Chemistry and a Doctorate in Biochemistry from Indiana University.

Source: Bloomberg Businessweek

*THE SAN DIEGO TECHNOLOGY ARCHIVE*

**INTERVIEWEE:** **Ken Buechler**

**INTERVIEWER:** **Mark Jones, PhD**

**DATE:** **June 4, 1997**

**JONES:** You have a PhD in biochemistry from Indiana. When did you first become interested in science?

**BUECHLER:** Well, I was interested in it. I was originally in chemistry as an undergraduate, and chemistry was a lot of fun, but it didn't have maybe the complications of biology in it, and I found that to be interesting, the combination of chemistry and biology, so, since I was very interested in chemistry, the biochemistry aspect of it was very interesting.

**JONES:** What kind of research did you do at Indiana?

**BUECHLER:** I studied an enzyme that is associated with synthesis of fat by the liver, and so this enzyme, called acetyl-CoA carboxylase is the enzyme that regulates fat synthesis. And so I studied how it is affected hormonally by insulin and glucagon, and also the polymeric structure of the enzyme was studied.

**JONES:** And what was the time frame, when you were at Indiana doing PhD work?'

**BUECHLER:** Well, let's see, I started, what, in '76 or so, and I graduated, I think, in '80 or '81, I think it was. And during that time, I actually did quite a bit of work in the Netherlands for my PhD.

**JONES:** There was somebody there?

**BUECHLER:** Yes. Somebody there also interested in the same topic, and so we collaborated. Then I graduated and did a post-doc. Part of the post-doc was back in the Netherlands for six months, and then I did a post-doc at Brandeis University in Boston. I did that for three years.

**JONES:** So, during this period, you were thinking about an academic career?

**BUECHLER:** Yes. Yes, that's right.

**JONES:** Then what happened to interest you in industry. When did you start thinking about….?

**BUECHLER:** Well, I guess, what happened was, how it all came about, my father lives here, and has lived here for quite a while, so I visited him here, and I knew it was a great place to live, so, at the time when I was finished with my post-doc, I decided I wanted to get a job here, preferably at UCSD. So, I interviewed there with a number of people and then, at the same time, when I was here interviewing, my dad said that there was this company, Hybritech, that was also looking for scientists, and why don't you just go up there. So, I called up and got an interview, and basically interviewed with Barbara McCampbell, Tom Adams' wife, and left my resume, and that was it. So, a week later, I got a call back from Gunars, who you just talked to, and Gunars wanted to me come out and interview, so I did, and I eventually got an offer from them, from Hybritech, as well as the university, and I guess it was quite difficult to decide what to do, but since I knew academics all my life, I thought, 'Why not try something different.' If I didn't like it, I could get out fast and go back to academics, but I did enjoy it, I did like it, so I didn't go back to academics.

**JONES:** And this was '84?

**BUECHLER:** It was '84 when I did this interviewing.

**JONES:** So, Hybritech was pretty well-established by that time…

**BUECHLER:** Yeah, I mean, they were established, I would say, but I wouldn't say that they were a slam dunk, to my knowledge.

**JONES:** And did you get a piece of the company at that time, too?

**BUECHLER:** Yes absolutely.

**JONES:** So, by then, it looked like the stock might actually be worth something. Well, I was so naive that I didn't really know, to be quite honest with you. Q: So, it wasn't a big part of your decision?

**BUECHLER:** No, I would say not. The stock wasn't really a big part of my decision, and again, probably based on being naive, and not really knowing what could

happen, so, I think for me it was more a challenge to go to industry since I knew the academic life very well. It was kind of a personal challenge, I think, to see a different part of life, and see what it could be like, and of course, I interviewed at Hybritech and I thought it was a very interesting and challenging project that they were going to ask me to do, and that also attracted me, just from the scientific point of view.

**JONES:** So, just in terms of doing scientific work, you didn't really distinguish that much between, you know, what your duties at the university would be, and the kinds of things you would be able to pursue at Hybritech?

**BUECHLER:** Yeah, they were totally different, of course, at Hybritech than they would have been at the university, but I think from the perspective of being able to use your talents to develop products that are beneficial, I think that really encouraged me, and also the challenge scientifically, which was still a very large challenge. Whether it's an academic research project challenge or an industry research challenge, they were very, very similar.

**JONES:** So, you interviewed with Gunars, and he described the project? Was this the ICON?

**BUECHLER:** Yes, the ICON project. So my duty was to make the ICON fewer steps, so at the time, you know, there were a lot of steps involved in finally getting the ICON result, and what they wanted to do was eliminate the enzyme. And the enzyme was the thing that finally developed color. There were problems with the enzyme because it can instable, the substrate could be instable. If you got rid of that, you would have fewer steps, and a more stable product. So that was what my responsibility was.

**JONES:** So, this was after Gunars had come up with the basic idea and before a product was introduced?

**BUECHLER:** No, the product had been released. I started in, what? March of '85.

**JONES:** I see, so it was basically improving the product that was already out there.

**BUECHLER:** That's correct.

**JONES:** Did you get rid of the enzyme? Did you have success?

**BUECHLER:** Got rid of the enzyme, had success, but about that time, Lilly bought us, when I finally demonstrated feasibility in all of this stuff, and when Lilly bought us, things changed, they weren't interested in doing this project, they wanted more scientists in product development making actual different products, and so, my shift took place to product development from research, and I developed the CK-MB assay, ICON QSR.

**JONES:** Which is the quantitative assay?

**BUECHLER:** That's correct.

**JONES:** Were you happy with that shift? You had come on, initially, with the idea that you would be doing basic R&D kinds of stuff, right?

**BUECHLER:** Yeah, I guess I took it as a learning experience. I valued learning how to develop a product all the way through into manufacturing and transferring products, so I think I valued that. I think what I didn't like, more than anything else, was just their attitude, Lilly's attitude, that is, of telling us how things had to be done, as if we didn't know how to do anything. They had a very arrogant nature to themselves. Not all scientists did, but many did, many that came there had this attitude, and yeah, I think it became less interesting from the standpoint of, 'Gosh, here we had this entrepreneurial company, and it doesn't appear to be that way anymore,' and I think the quality of people that I had to start working with, when that shift took place, I didn't care for, from the standpoint of I didn't think they were good scientists. I mean, it's probably not a nice thing to say, but if you want the answers to all these things, these are the kinds of things that transpired. It wasn't a really happy time. It was OK. It was still a good learning experience, and gosh, what I always called it after we started Biosite was I called those days boot camp. And that's really what it was, where we learned many things and made mistakes, but you know, we used that knowledge to make this company a better company.

**JONES:** When did you learn about the Lilly sale?

**BUECHLER:** When it happened. I didn't know anything prior.

**JONES:** There weren't rumors floating around?

**BUECHLER:** I didn't hear any.

**JONES:** What was your immediate reaction?

**BUECHLER:** Well, I was very familiar with Eli Lilly, since I came from Indiana, and in fact, I didn't like Eli Lilly, well, I liked it, but I didn't want to work there. All the people in Indiana want to work at Eli Lilly, because once you have a job there, you have a job for the rest of your life, that's kind of the attitude they have. When I was a high school student, I was in like a program for science students, and in that program, certain students out of each high school were selected from the city, Indianapolis, and this program, then, allowed you to go to Lilly and learn many things about the company. And so, I saw many things at Lilly, I saw what was going on, and you know, I recognized that it was probably a good company, but it was a huge company, and I just didn't feel that I was interested in that kind of approach to doing science, you know, it was just a personal feeling. So, when I graduated, I could have easily gotten a job there, but I just had no interest in it. So, I knew the company. When they bought us, I thought, 'Well, we'll still have the same company here.' A lot of other people, Dennis Muriyama, for example, I'm sure you've interviewed him. He said, 'I think this is a good move, and I think everything will work out fine,' and so, you know…

**JONES:** When the change really began, you were working closely with Gunars, right? He just told me that people there didn't care about, or weren't paying any attention to what he was doing.

**BUECHLER:** Yeah, people didn't pay attention to Gunars. I mean, they really put him off into a corner, basically, and why they did that, I don't know. I have no idea. I reported to somebody else, and he and I still worked together because we were friends, and he's a very good scientist, and you like to talk to good scientists because it's mentally stimulating.

**JONES:** Do you think this was Lilly's approach because they bought the company for the therapeutics?

**BUECHLER:** Yeah, well, they had no expertise in it, that's for sure, and maybe their lack of interest, or maybe they looked at it as solely, 'Gosh, this is a way to make money, and let's make this place make money, and let's not develop anything new,' not recognizing that that's very important in a diagnostic company, to do develop new products, probably important for all companies, but nonetheless, it could be the reason.

**JONES:** So, this is 1986, the Lilly sale. You stayed on for how long?

**BUECHLER:** Until 1988.

**JONES:** You all left together at that time?

**BUECHLER:** Yes.

**JONES:** So, what kind of discussions did you have during this period? Was this sort of a situation where you were growing increasingly disenchanted?

**BUECHLER:** Yeah, kind of, and I think that Gunars and I started talking, I had been interested in developing a sensor for gasoline detection.

**JONES:** Detecting gasoline in…?

**BUECHLER:** In the ground, in groundwater, for example, leakage from tanks, and things like that. It had been something I was doing prior to Hybritech, and so I had developed this sensor, and I talked to Gunars about it, and it was kind of, 'Gosh, we could build a company, selling these things and building them, and this and that,' so we started talking about that sort of thing, and then, at that time, we also thought, 'Why should we work for Eli Lilly when we can quit and start a company doing diagnostic things, as well?' And, you know, because we were somewhat disenchanted, and wondering, 'What does the future hold?,' and so, we then began to talk about, 'Gosh, what areas could we get into that Hybritech isn't interested in?' And so, we started doing that. We started then kind of deciding that the marketplace would be a drugs of abuse type of marketplace, and that's, I don't know how much of this you want me to get into….

**JONES:** Go ahead.

**BUECHLER:** So, I guess from our initial discussions of starting a company, we decided, well, we of course need a president, and Gunars knew Kim quite well, because they worked on the ICON project together, Kim was in the business aspect of it, and Kim was also good friends with Tim Wollaeger, and so, it was quite a logical extension to say, "Gosh, Kim could be our president, because he knows the diagnostics, he's in business, and he also knows the guy who's got money.' So, we called Kim up and so we actually, one day, met at a Chinese restaurant to talk to him about this opportunity and the area that we wanted to start getting into.

**JONES:** And why did you settle on drugs of abuse?

**BUECHLER:** Yeah, good question. First of all, it was very apparent in the literature that, first of all, there was no screening test for drugs of abuse. All drugs of abuse tests at that time were instrumented, and since we were kind of in the business of fast diagnostics, with the ICON, in particular, that that's where our mindset was. 'Gosh, the market does not have this,' and we believed that the market did need it. And that was our feeling in the very beginning, and then, of course, during that year, it was almost a year prior to when we quit, that we actively thought about the market and how we could understand the market, what were the problems currently on the market for doing drugs of abuse, and recognizing that, clearly, there was a need for visual drugs of abuse tests, and not only was there that need, but what were the characteristics of the product, what did that product have to do in order for it to be a successful product? So, that's what we did in that year prior to us quitting.

**JONES:** You were still at Hybritech talking about this stuff?

**BUECHLER:** Yeah, we only discussed marketing things and sales things, and what we believed the market needed. We didn't go, at all, into any scientific aspects of how we could accomplish this. We were very careful about the things that we did prior to us quitting. We went to an attorney and talked to this attorney about, you know, our situation. Here we were, working at this company, but we wanted to quit, what could we do, what couldn't we do? And he told us, of course, you can talk about things that are known in the marketplace, but you cannot talk about science related things. You can't invent, because if you invent, then these then are properties of Hybritech.

**JONES:** At this time, when Lilly bought the company, did you have to sign employment agreements with non-compete clauses?

**BUECHLER:** Well, I'm not sure about Lilly. We had them with Hybritech.

**JONES:** But this particular aspect, it's a different market.

**BUECHLER:** Totally different market, different product, everything was different.

**JONES:** But you were confident at this time, even though you weren't having about the technical end of it, that you could make it work?

**BUECHLER:** It seemed like the market needed this product.

**JONES:** And you were confident that technically you could do it?

**BUECHLER:** Yeah, I mean, anything's possible. You might have to work hard to do it?

**JONES:** And you were confident that you could raise the money?

**BUECHLER:** Well, again, because we knew Tim, and Ted Greene, as well, they were at Biovest, and you know Kim's proximity to Tim, all of this kind of was a package deal that seemed OK, and yeah, we talked to Tim and Ted prior to quitting, of course, and we knew they would fund us. We knew that prior to quitting, so, of course, the amount of money that we got, which was $600,000 was not a lot of money, but nonetheless, we figure that would keep us going for a year, and be able to do some marketing studies, further marketing studies as well as demonstrate technical feasibility of doing this kind of immunoassay that had not been done before.

**JONES:** Do you still have the gasoline sensor idea in your back pocket?

**BUECHLER:** You know, probably not, because I haven't really done anything with it. I just haven't had time.

**JONES:** Has anyone else?

**BUECHLER:** Yeah, it was a hot item at that time, and people have since developed these things. It was a time when, you know, you were seeing gas stations being dug up and gas tanks being pulled out. That's kind of the area my dad was in, so that's kind of how I was close to the area, and knew what was needed, something that...

**JONES:** Was your dad an engineer or a scientist?

**BUECHLER:** Yeah, he was more of an engineer.

**JONES:** Well, OK, you've started Biosite, and I've heard stories from Tim Wollaeger about setting you guys up in a loft somewhere around here, was it down here?

**BUECHLER:** Up in GA.

**JONES:** This was Grandma's Diagnostics, you had a rocking chair.

**BUECHLER:** We didn't know the name, right.

**JONES:** Basically no lab?

**BUECHLER:** We had no lab. It was one room. We had four desks and a phone, and a chalkboard.

**JONES:** What did you do there?

**BUECHLER:** We thought, 'What the hell are we going to do? How are we going to do it?' We kind of knew what the market needed. We felt that the product needed to have what we call now a threshold assay built into it, threshold meaning that the signal would be hidden a certain concentration and below of analyte, even though it's there, and the reason for that, of course, is NIDA, the National Institutes of Drug Abuse, had requirements that stated that if certain concentrations of analyte are present below the thresholds that they set, that it would still be negative. So, in order to develop a visual product, you had to hide the signal.

**JONES:** And it was important to develop the visual thing just for speed and convenience?

**BUECHLER:** Absolutely, because we were wanting to get away from instruments.

**JONES:** What kind of marketing studies did you do?

**BUECHLER:** Kim could probably tell you all about that better than I, but, I mean, I do clearly remember that Kim made a lot of phone calls, phone marketing, calling hospitals, calling physicians, seeing, yeah, there appeared to be a need for this. You know, it was kind of a straw poll in some ways. When we wanted to get another round of financing after that first year, prior to starting, the venture capitalists thought that we really needed to spend a lot more money getting a marketing study done by a very large firm, a more reputable firm, so probably about six to eight months into the company, Kim would know exactly, we started that.

**JONES:** But that was primarily an exercise, though, to produce something for investors?

**BUECHLER:** Exactly.

**JONES:** You guys had a good idea?

**BUECHLER:** Exactly.

**JONES:** What about the technical end of it, then, how did you decide to proceed with that?

**BUECHLER:** Well, the technical end of it, we, you know, the day that we quit, I think it was two or three days later, Gunars and I, I'd been thinking., of course, about how to solve this problem, and oh, it was two or three days after we quit, Gunars and I went to Price Club to buy pencils and a couple of other things that we had to have, and we went to the Cass Street Bar & Grill for lunch, and so there we discussed how we thought we could do it, how we thought we could make this threshold work, and kind of started the ideas there of how it could be done, and so, these thoughts built on themselves over probably a couple of months.

**JONES:** There were problems, obstacles that you had to face?

**BUECHLER:** Yeah, I would say there two major obstacles. First, was the immunoassay technique itself, where you had to develop this competitive assay with this threshold built in. That was problem number one. Major problem number one -- of course, sub-problems are related to how you're going to do all the chemistry, and what you were going to use as your label and all of the things that you have to worry about in a diagnostic product. The second major problem was, 'What kind of device are we going to use. How are we going to make this into a plastic device that's small and portable and everybody can use? So that was the second major problem that we had to work on.

**JONES:** Can you describe what the solutions to these problems were?

**BUECHLER:** Yeah, for the immunoassay technique, it was a matter of putting in enough antibody into the reaction mixture, in other words, this mixture with the urine, to bind up all of the drug that was present up to the threshold concentration, so that there would be no competition event, these are competitive immunoassays, so if you bound up all the drug, there could be no competition, and so therefore, there would be no signal. Now, when there's drug present at a threshold concentration or higher, then you have competition, and then you have an immunoassay. Furthermore, that scenario allowed the signal to increase with analyte concentration. And using very high affinity antibodies, the signal rose very rapidly over a very narrow concentration range. And it was essentially developing a digital assay, and all of these things we found out after, of course, we got into the lab and did some of the experimentation. We did model these things, as well, found that, 'Gosh, look what

happens when you have a very high affinity antibody,' which is what we knew we needed. But nonetheless, look what happens, you get a digital response. So, that was probably the key finding there, to use excess antibody in order to develop this threshold assay, and we have patents on that now.

**JONES:** And the basis for the patent is....

**BUECHLER:** The basis for the patent is that, the use of excess antibody to bind up analyte at the threshold concentration or below.

**JONES:** And the other problem was....

**BUECHLER:** The device. The problem there was that, Gunars, of course, had invented the ICON at Hybritech, and that was a membrane on an absorbent material, and so fluid went through there and concentrated. The excess fluid went into this absorbent. So the question is, "How the hell do you an assay, make a device, with that principle, but not using it.' So, the thing that occurred to me was that, rather than using an absorbent material, which the ICON patent clearly talked about, what if you used a non-absorbent material? Well, if you use a non-absorbent material, how do you make it go through? And the thought was, 'Gosh, why don't you use a series of grooves underneath. These grooves, then, when you put them together, form the capillary space. It's a non-absorbent material, but when you put them together, because they're in close proximity and there are grooves there, the capillary force would pull the fluid through.

**JONES:** Is this basically the same as this device that Gunars was showing me?

**BUECHLER:** No, that's really a totally different thing. That uses concepts of microcapillarity to work. This was a much more primitive idea, that if you put the membrane on a grooved surface, you have now created a capillary space under that membrane that pulls fluid, so, it's really, what we used a record, I think it was the Beatles' White Album that we broke for our grooved surface, and put the membrane on there, and sure enough, it worked. You know, as simple as that. So, that was a very important result in then making our device because then this device did not infringe any patents, which was really a problem in the diagnostic field, because a) people were infringing the ICON, we did not want to, and b) people were trying to find ways not to infringe it, so there were all kinds of weird things, people using vacuums, and just all kinds of strange things, but that's what we ended up using then.

**JONES:** And when you got the first money from Biovest, this was before you'd solved these problems? You didn't really have a proprietary position?

**BUECHLER:** When we got our first seed money, we had nothing, except, 'This is what we want to do. This is what the market is. Technically, we think that we can do it.'

**JONES:** But later, when you got the bigger chunks of cash by bringing the venture capitalists in, by that time, you had a well-established, not just the marketing end, but the technical?

**BUECHLER:** The technical end, yeah. The device was invented, you know, I think that summer, the concept of the membrane on a capillary groove structure. The immunoassay, I think, was finally reduced to practice on the Fourth of July weekend, or something, I mean, I could look at my notebooks for these dates, but something like that.

**JONES:** How hard were you working during this period?

**BUECHLER:** Every day.

**JONES:** Weekends?

**BUECHLER:** Oh, yeah.

**JONES:** A lot of hours?

**BUECHLER:** Oh, yeah.

**JONES:** Was this a departure from what you had been doing at Hybritech?

**BUECHLER:** I worked pretty hard there, too. Not as hard, of course. I worked harder at Biosite because failure meant….

**JONES:** If you didn't perceive Hybritech as a risk to your scientific career, this was?

**BUECHLER:** Oh, yeah. Well, it was a risk, but I think, mentally, for me, I felt very confident. It's just a matter of working hard and you get the job done. It's really that simple.

**JONES:** When you had these initial problems that you took care of, was it basically just the four of you at the beginning? Had you hired other people when you were running these initial experiments?

**BUECHLER:** Not initially. I think our first employee was an engineer, and he helped with the device work early on, and then the next person we hired was an organic chemist to do all the drug synthesis that we needed to do in order to make the product, which was a very long, difficult project.

**JONES:** And then when the company started to grow, in the beginning was it basically R&D? Or would you say that immediately it was product development?

**BUECHLER:** Yeah, you see, Triage was very complicated because you had to do all these immunoassays together simultaneously, and so, nobody had ever done this before. In fact, one of the venture capitalists who did not invest in us, Dick Schneider, he was an expert in this area, he was from Syva. He said, you know, 'This can't be done.' He said, 'If anybody can do it, you guys can do it, but I don't think it can be done.'

**JONES:** This was the problem, not with the device, but....

**BUECHLER:** The immunochemistry itself, and how antibodies recognize linkage chemistry, and all of these problems. So, during the course of development, there was still tremendous research activity, because we ran into problems that people had had, and these problems had to be solved in order for us to progress, and many times, they were major problems. And we solved all of those problems, luckily, and you know, they're really then topics of patents because are things that you had to pioneer your way through in order to get something to work, so they became intellectual property, if you want to call it that. Gosh, for Triage, there are many patents.

**JONES:** Yeah, I was looking through the patents assigned to Biosite, and most of those are yours. Has there been a division of labor among the founders? I assume that Kim Blickenstaff is the business guy...

**BUECHLER:** That's correct. Gunars was also involved in the technical stuff. Gunars and I did all of the lab work, and all that stuff. I just happened to come up with some good ideas, I guess, but Gunars also contributed and is an outstanding scientist, so....

**JONES:** When you were putting together this operation, none of you really had any real experience at being managers of people or an R&D operation, right?

**BUECHLER:** Not really.

**JONES:** Did you rely on your experience at Hybritech?

**BUECHLER:** I'd say so, and there I took courses in management. I was lucky enough to get those courses, and they all benefited me very much, and probably the thing that I learned the most from these courses is that, you know, I guess my attitude of work is, is it's almost suicidal, you know, you don't stop until something is done, and you continue thinking about things no matter what, and failure is no...You don't have failure. That's not an answer. You can't fail. And so, that was always my attitude, even in academics, I think. And that makes a person work extremely hard, and it makes you do nothing but think about work, mainly. So, I expected other people to be that way. And I think these management courses were beneficial because they made me realize that people just aren't that way. And you're not going to make them that way. So, for me, that was probably the most enlightening thing, to be a good manager, to recognize, you know, that there are individuals that want to be this way, but then there are many, many more that don't.

**JONES:** What about sort of living through the change from early Hybritech to the post-Lilly Hybritech, after the sale, seeing that. Did you have in mind, well, we're going to have a place that was like Hybritech before?

**BUECHLER:** Yeah, we kind of did, but you know, as a Biosite employee, we clearly recognized the importance of focus, and what we did had to be related to the product that we were trying to get out, because without a product, you don't make money. And so, the risk that you might take is a risk in saying, well, 'I want to do this experiment,' but the risk is simply that this approach might be the wrong approach, if you understand what I mean by risk, and so things we had to decide on, which experiments were the right experiments, and all those things were important for efficiency and productivity.

**JONES:** Well, you just went public this year, in February. It's been eight, nine years. Isn't that a long time to wait on an IPO? Was it just conditions in the market?

**BUECHLER:** There were a number of things. The market was an issue, but we were also being sued by Abbott. It's publicly known, it's in our prospectus, in fact, that had a settlement with Abbott. So, that also prevented us from going public at a reasonable price. Who's going to want to invest in you? So, we had to settle that. And the reality was, that lawsuit was a frivolous lawsuit. They were suing us because we were taking their market share, and the patent that they said we infringed, you know, I'd stake my life on the fact that we didn't infringe that patent. We didn't even know about a patent. It had nothing to do with the way our device functioned or the way our immunoassay functioned, but nonetheless, they sued us, because you don't really need grounds to sue anybody. You can sue anybody for any reason, and they sued us for that reason. We fought it, and you know, two years into it, we were still waiting for a judge to give us a summary judgment, and he wouldn't. The courts were slow, we wanted to go public, and we said, 'To hell with it. Let's just settle this thing.' And there was some motivation by Abbott to settle because we uncovered many things in the prosecution of that patent, most of which is all confidential, so I can't go into the details, but Abbott was also in a mode of wanting to get this thing settled as well. So we settled.

**JONES:** Was this the District Court here?

**BUECHLER:** No, it was in Chicago.

**JONES:** I don't know if it would be worthwhile to look at the proceedings from that, if a lot of it is confidential.

**BUECHLER:** I don't what is confidential and what isn't, so basically, I'm not going say anything about that in detail.

**JONES:** Were there problems with the venture capitalists during this period?

**BUECHLER:** No, I mean, I think that they also recognized that it was ridiculous. They recognized Abbott's motivation. Abbott's been known to do these things to companies. You know, they're assholes.

**JONES:** Well, they're big, too. They can afford to do these things. Among the big companies, is Abbott unusual in that respect? Does Abbott have a reputation for this?

**BUECHLER:** They have a reputation for being…whatever adjective you want to use.

**JONES:** OK, do you have any good anecdotes about putting Biosite together? Any funny stories?

**BUECHLER:** There are probably a lot. I guess one funny story is Kim, when we started the company, maybe three weeks, four weeks into it, asked us whether there was any water in the swimming pool, even just prior to quitting, 'Do you guys really know what you're going to do?' He's not a scientist, of course, and you wouldn't expect him to have a feeling for the science, but he wanted to know, because we never talked about science, and so he would say, 'Is there any water in the swimming pool? Just an inch, a half inch, ten feet?' And so, the analogy, of course, was that, you know, you shouldn't dive into anything when there's no water, right?

**JONES:** And you convinced him?

**BUECHLER:** Well, we told him that, 'Of course, there's water in the swimming pool.'

**JONES:** Well, this is similar to when you're talking to venture capitalists, right, trying to get them to invest? How do you think they make judgments about these technologies? Dick Schneider might be an exception.

**BUECHLER:** Yeah, the venture capitalists mainly look at markets. Venture capitalists, while some are scientists, most of them look at the market, and they ask, 'Is there really a market for this product?' That's the first thing that they consider. I think rightfully so, because really, what we thrive on here, as a company, is called market-driven science, where we don't just develop some science, or invent something, just for fun, and say, 'OK, here world. Here's this thing.' We do it the other way around. We look and ask, 'What's needed out there?' And then, once we know what's needed, then we invent, and that's clearly what we have done with our product portfolio, and Triage is a clear example of that, as well as the cardiac device, and the instrument that goes along with the cardiac device.

**JONES:** Where did that philosophy come from? Did it come from sitting down and trying to figure out how to start a company? Was it before that?

**BUECHLER:** Yeah, that's a good question. It may have evolved from the standpoint of recognizing that we had to do a lot of marketing work prior to knowing what kind of product to develop, and it just so happened that we had an entire year to do a lot of marketing stuff before we quit Hybritech. There was an article written about us in

the Wall Street Journal, and that article talked about this market-driven science thing that I'm sure other people have also done.

**END INTERVIEW**

## Recommended Citation:

Buechler, Ken. Interview conducted by Mark Jones, June 4, 1997.
The San Diego Technology Archive (SDTA), UC San Diego Library, La Jolla, CA.


**The San Diego Technology Archive (SDTA),** an initiative of the UC San Diego Library, documents the history, formation, and evolution of the companies that formed the San Diego region's high-tech cluster, beginning in 1965. The SDTA captures the vision, strategic thinking, and recollections of key technology and business founders, entrepreneurs, academics, venture capitalists, early employees, and service providers, many of whom figured prominently in the development of San Diego's dynamic technology cluster. As these individuals articulate and comment on their contributions, innovations, and entrepreneurial trajectories, a rich living history emerges about the extraordinarily synergistic academic and commercial collaborations that distinguish the San Diego technology community.