

Chapter 40

CAROL (QUARCK) GRISEBACH

Freiburg im Breisgau

March 10th, 1997

VM = Vivian Moses; CG = Carol Grisebach

VM: This is talking to Carol Grisebach on the 10th of March, 1997 in Freiburg.

Can I start by asking how you came to be in Berkeley, in Calvin's lab.?

CG: Yes, you can. After I finished my education at the universities, I went to work for Eli Lilly.

VM: Which university was that?

CG: The University of Wisconsin; before I went to Duke but this was Wisconsin. I enjoyed that part of my development very much because a chemist named Kurt Gerzon, with whom I am still exchanging letters and he is still as active as ever, I learned a great deal from him. We had also private conversations which were very important for me, too. But the thing is that Indianapolis is, for me a dead place, there's practically nothing going on there for young people. After a while, I thought if I stay here I'll be buried here more or less. I just felt there were just a few young women that were in this laboratory, all the men were married. Eli Lilly always saw to it that they were married before they hired them because it's easier. So then I told Kurt my decision. He was very kind about it and said "well, I'll be sending you material on what the latest thing on erythromycin so that at least you can keep up with that story when you go. And actually I hadn't met...that was actually right after I had met Professor Calvin and there was some kind of meeting there and we were allowed to go there in Indianapolis.

VM: What had your background been?

CG: Chemistry.

VM: Straight chemistry?

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CG: Straight chemistry. I attended this meeting and I remember Melvin Calvin turning around, we had been talking about it, and I said “oh that (*Berkeley*) must be a wonderful place to live in and work in.” And he said “well, just send in your application” — that was a sort of a little bit...just a side comment we were having and I said “well, I think I really may do that.”

VM: Did you take him seriously?

CG: Yes, I took him seriously. He said you just come. I said that we were planning a trip to California with three other Lilly women and everything went smoothly. I got the position and after that, that was the lab. that I worked in and that’s where I met my husband on the very first day. I had driven to California all the way from Eli Lilly and I walked into this laboratory, the old one, of course, and there was this young man, very tall — he just smiled at me as if he had always known me. It was all sort of almost like a Cinderella story. Everything worked out the way I had hoped it would. Then Hans (*Grisebach*) had to go back (*to Germany*) because he had only a year’s leave. He had a scholarship from NASA. That was up and he had to go back to Germany.

VM: The space agency?

CG: Yes. I doesn’t mean anything usually about your own work. Then I continued to work in California for...I was there for three quarters of a year altogether.

VM: So Hans had gone?

CG: He had to go. He had only the scholarship and he went back to Germany./

VM: How long after you got there?

CG: Very soon... about a month, I think.

VM: So, your attachment was a bit whirlwind.

CG: Yes, yes, yes, yes. But he said “now, see that you can come over”. So I applied for a scholarship to a German-descendent professor who was still there and enjoyed talking with me because I knew people in Germany. Now I’ve forgotten...what is his name? I went to him because I needed references and he immediately gave me one and talked with me some time about Germany.

VM: Can I backtrack a bit? When you were at Lilly you were already postdoctoral, were you? It was your PhD you did in Wisconsin?

CG: No in Wisconsin I didn’t; where did I do my PhD? That was later, I thought. I’m getting confused. Before I went to Lilly I was at the University of Wisconsin and there I told my professor that I didn’t want to get a PhD there; it was just too much for me. Later I got a PhD but I’ve forgotten how that went, how I managed that; I think in Germany.

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VM: Did you not mention Duke?

CG: Yes, I did undergraduate work at Duke and graduate work at the University of Wisconsin...

VM: But not for a PhD; that was a master's degree?

CG: Yes, I stopped with a master's there. Then because Hans said that in Germany it would be very much better if you had another degree, that's when I then also: I went to the University of Munich. Not, not Munich, excuse me: Berlin. At that time there were still circumstances and you couldn't tell where they were going and it was just luck if you got a position and your husband got a position. His (*Hans's*) professor had a lot of pull and he had specifically gone to Berlin so he got me a position there too. And that's when I got my degree.

VM: You don't mind me asking questions?

CG: No.

VM: I will ask for Hans as well because unfortunately he can't answer for himself.

CG: Of course.

CG: He was not yet finished and when he came back to Germany he went back to his old professor and got another degree (I can't remember the names of the various steps in the Germany system). At any rate he got to be a full professor. I'm trying to remember where he worked after he finished up in Berlin. We were married fairly soon after I came to Germany and for some reason we landed in Freiburg but I can't remember what it was, why we landed there.

VM: What was his status when he went to Berkeley? Why did Hans go to Berkeley?

CG: I think he was not yet *habilitiert* — what they call *habilitiert* but he was working on it.

VM: So he didn't actually have a permanent job to come back to.

CG: No, no, not to the US; not at all.

VM: And when he came back from the US?

CG: When he came back from the US he went back to his old professor and he...I don't know whether it was just *habilitiert*, that was one step; I can't remember what all those were called. Anyway, he got to be a full professor; he had what you needed to become a full professor.

VM: So he'd been in Freiburg before he went to...

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CG: No, he hadn't been to Freiburg at all...after we got to know each other...

VM: It's all so long ago.

CG: It's all so long ago. He went...I'm trying to remember where he worked then. When we came back to Germany, we were married first and for some reason we landed in Freiburg but I can't remember what it was, why we landed in Freiburg.

VM: And why did Hans go to Berkeley?

CG: I think he told it was a very nice place to be. I don't know about Calvin; I don't know how much he knew about Calvin.

VM: Was he a chemist?

CG: A chemist.

VM: A straight chemist; not a biochemist?

CG: Straight chemist. He did this other work; I don't know what was considered at that point. He was doing this work when he went to Calvin. There he changed and did that work so you could call him...

VM: His background was that of a chemist.

CG: Yes, an organic chemist.

VM: I now have both of you in Berkeley. Obviously you don't remember what it was like when Hans first went there but you remember what it was like when you first went there because you saw him when you walked through the door. What happened as far as your work was concerned? How did it happen that you started working on some particular project? Did you talk to Melvin; who else might you have talked to?

CG: Al Bassham. Al Bassham was sort of in charge of our laboratory. He was having a problem with his wife and he did divorce her then married this young girl who was in the laboratory (*Donner Lab.*); he was much happier after that. Well, I remember coming into the lab. and seeing all of these people, Hans especially. We did an awful lot of chromatograms to get that missing link. Alan Barker was also involved with that...

VM: Yes, we hope to see him within a few weeks.

CG: Say "hallo" and please give him my regards. And he was sort of my superior...well, we didn't have superiors...

VM: Your mentor.

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SM: Mentor: I had to be introduced to all these things. So he showed me what to do and I remember looking for...but I don't think we ever found it.

VM: What was the missing link you were looking for?

CG: It was some kind of product, we thought — or he thought — which was being produced in some kind of chain and we were trying to find it on the...is it a chromatogram?

VM: You mean the X-ray film?

CG: Yes.

VM: The radioautograms.

CG: Yes, I think that was it. We couldn't find it where it was supposed to be once you ran it. I don't remember how that turned out because that was pretty close to the time that I was already leaving.

VM: But you did publish some papers there, at least one (I don't know how many) because I saw your name, when your name was Quarck.

CG: Yes, Quarck, right.

VM: And you published under that name. And I don't remember how many. It's in the record books.

CG: It's not a great deal because I went to too many places, actually, you know, to get my name...But on the other hand, I learned a lot that way and each stop that I had (Wisconsin [university] and practical things going on at Eli Lilly): that was especially now because of Kurt Gerzon, a very kind of special person.

VM: How do you spell his name?

CG: G-e-r-z-o-n. He was a Dutch Jew that emigrated just in time. I guess he got over to...he lived on one of those islands, a Dutch island because had to leave Europe; he never talked about it. He always tried to have something positive. We had all sorts of discussion but he always managed to see to it that everything was done, that we didn't get off the track. It was pleasant for me because I learned a lot. I just thought he was a very, very nice person, and very, very cultivated; I mean he knows a lot. I still correspond with him; about a month ago he wrote me a long letter, several pages, and what's he into? Now, of course, he's retired but he's still as busy as ever.

VM: Can I take you back to Berkeley?

CG: It's because that bit came first, you see, before Calvin.

VM: You worked the whole of your time in Berkeley in ORL, the wooden building?

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CG: Right; yes.

VM: Working in the group with Al

CG: Yes.

VM: Did you work with Hans directly?

CG: I don't think so. He was doing something else — but what was it? Oh, I know: that acid...

VM: Lipoic.

CG: Lipoic acid. Yes, that is what he was working on.

VM: Can you remember...you already remembered Alan Barker and Hans being there. Can you remember who else was in there while you were there?

CG: The girl, Marilyn...

VM: Marilyn Taylor.

CG: She was always coming. There was a couple, also I think from England — anyway, they had an English accent, a very tall — Monty, his name was.

VM: Oh, Monty Frey.

CG: Yes — and his wife.

VM: Don't know his wife, yes. Saw him quite recently.

CG: They were very nice and interesting because Calvin had such a nice way of integrating, I mean of calling a meeting and having the girls...what do you call them? They're not assistants in the laboratory...?

VM: Technicians.

CG: ...technicians and they...Professor Calvin always insisted that they take part even though they didn't people into the lab., he would call a meeting and having the technicians take part as well even though they didn't understand most of it . I was very impressed by that. I am sure that it worked favourably on their feeling for the lab., I think it probably really paid off in that way.

VM: Was his lab. very different from what you had previously experienced at Lilly and Wisconsin?

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CG: Well, let's say, yes there was a difference. Because at Eli Lilly they had found certain things and this was research, their department was research and a lot of interesting things came from that. Dr. Calvin, now, always had these group meetings, everybody was sort of involved and he was always so positive, he was sure that things would be coming up the way they were hoping to do it and so forth. That was a very nice atmosphere; whether it was always that way, I don't know, but it just made the atmosphere very pleasant. He was that way all the time. When I first came, when I first met him, he was that way at that meeting—I said “that sounds wonderful and he said “yes, yes, come out”. You know: without even...that was his way.

VM: Did he come into the lab. often? Did he talk to you often when he was there?

CG: No, I don't think so. But, of course, I wasn't there very often; it was usually Al Bassham. You know, he was my boss, more or less; he had been there a long time.

VM: Had Andy Benson left by the time you were there?

CG: Yes. He was gone and he must have been very popular because a number of the women were always mentioning him.

VM: He would be pleased to hear that!

CG: Where did he go? Further south?

VM: He is now in La Jolla. He has been in La Jolla for 33 years, he told us, but he had some intermediary stops in Pennsylvania and Los Angeles before he landed up there. He has done very well since then. I have been in touch with him quite a lot recently. What about the social atmosphere in the lab.?

CG: Let's say, nobody was standing around gossiping or anything like that, I would say. We had these weekends that really were open to everybody: somebody said “I'd like to go skiing, too” or “I'd like to do something” and everybody usually would be willing to take another person in a car and drive out to those places that have enough snow...forgotten their names...

VM: Up in Yosemite and places like that.

CG: Yosemite and also a couple of other places that we all went.

VM: Squaw Valley.

CG: Squaw Valley. The we would spend the night there because it was too far and I remember that young girl that married Al Bassham then...

VM: Her name is Leslie.

CG: Leslie, right, and that was where this developed. You could see that this was going to...he was already divorced. I haven't heard anything about them or seen them. I

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haven't returned (*to Berkeley*), as a matter of fact. I was in...I wasn't in Berkeley, somewhere else once since I'd been there. I forget with whom I was...after Hans...I think, to visit somebody, I don't know. But otherwise, I think that's about...there's not too much more that I can talk about.

VM: So were you one of these people there, as it was in my day, in my period, who worked day and night, as it were, weekends when they felt like it, or were you less dedicated?

CG: I pretty much followed what Alan Barker was doing. He was really into everything. He had to learn himself but he was always there in the morning and I felt I could ask him something. But, of course, he wasn't near as far along as the others were.

VM: He was there when you got there, was he?

CG: Or else it was almost the same time. I remember we had a big party at somebody's house, I think it might have been mine, I don't know. I had rented one with a girl friend there. Anyway, I remember that. Everyone was very jovial, we had a very good time. Of course, he had a very strong accent.

VM: Alan Barker? Yes; I think he still has.

CG: I don't think he could lose that; it was probably too late anyway. But I understood him. He had a very nice wife. That was always nice, I thought, that everybody was included so that there weren't wives sitting around for a year being sort of shut out of things. Again, I think that goes back to Calvin, how he reacted. There was this very tall Swedish-looking man; now what was his name? He was still there when I left.

VM: The name I can remember is Arnold Nordal...

CG: No.

VM: Goran Claeson.

CG: No. He must have left earlier then.

VM: In that case, I don't know.

CG: No, he must have left earlier. I can't remember what his name was; it was very Scandinavian. He was very tall and I think his wife was very short or something like that; I can't remember.

VM: You don't mean Ozzie Holm-Hansen?

CG: Yes!

VM: Oh yes. He became very friendly with me. His wife was called Harriet.

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CG: Right; Harriet, yes. Right, right, right.

VM: They are now divorced and, in fact, have been for many, many years. He is in La Jolla as well.

CG: He's in La Jolla? Uh huh.

VM: He long outlasted you. He stayed there until about 1959, 1958 or 1959, I can't remember exactly.

CG: Yes, yes.

VM: He spent three years there. Yes: he's a very nice fellow.

CG: Very nice; yes, yes. So gradually, I'm getting practically everyone that was there.

VM: Now I can begin to get you more accurately. You must have arrived there in 1955, in that year '55/'56 and I am sure that Ozzie came a year before I did and I was there in '56. So that means you ought to have a bit overlapped with Rod Quayle.

CG: Wait a minute...Rod Quayle...a little before. Is he from England?

VM: Also a tall fellow. He had to be a year earlier than; that's quite true.

CG: I don't know whether I saw him or not.

VM: Do you remember a young man called Karl Lonberg who was a graduate student?

CG: Yes; he was a graduate student.

VM: You worked in one of those big rooms, did you, in ORL with lots of people coming in and out?

CG: Yes. People coming in and out. It was all very harmonious. Everybody wanted to do his best, I think, there. The atmosphere there...

VM: It wasn't...

CG: ...so much competitive, that's very important.

VM: I think one of the factors is that people were very young comparatively and that many of them were people who were passing through and weren't staying there very long. That was a step along their path of life and they weren't competing with anybody.

CG: Oh, I think definitely, definitely. It was a wonderful atmosphere. Then there was the secretary, Alice...

VM: Alice Holtham.

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CG: Alice Holtham.

VM: She now lives in Seattle; we visited her last year.

CG: Was she married?

VM: Yes; she married someone called Ernie; he name is now Alice Lauber. She married a man Ernie — Ernie Lauber — and they live in a house in a suburb of Seattle.

CG: I have a nephew there and sometimes I go there. And who...?

VM: Was Alex Wilson one of your contemporaries?

CG: No, I don't think so. I don't remember that name.

VM: Well, I'm beginning to place you in the scheme of things. I think I have pretty well established when you must have been there. Hans got there essentially a year, or the best part of a year, before you did, you just overlapped at the tail end.

CG: Overlapped for just about a month. But we had a lot of fun. I remember we went down to that nice place on the beach down there; we went there with another couple on weekends. There's a beach on the ocean...

VM: ...near San Francisco?

CG: Yes.

VM: Stinson Beach?

CG: It doesn't really matter. You can get to it fairly quickly and has a nice beach. Then there was another one — there was a golf course there and we all had our picture taken with a fantastic car, I remember that was a big joke. Hans had a really old car, because he had no money, of course, when he came there. He had this old thing; we were always afraid that it would break down before we got back.

VM: Everybody ran these old jalopies, didn't they? None of the postdocs. or students had much money did they? They had enough and they all had old cars; it was fun...they broke down from time to time but it wasn't too serious.

CG: I saw pictures of that.

VM: You don't remember where you lived in Berkeley, do you; which street it was on?

CG : No. I know about what section it was: very close to campus. I moved because the first one, the woman that was renting that out was not too pleasant. Then I roomed with another but she wasn't in Calvin's laboratory., she was doing something else in

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California. We shared that apartment; that was a lot better than the other. We did a lot of hiking. It was a lovely time, it was a wonderful time.

VM: When you moved on, he (*Hans*) came back to Germany and you eventually joined him here. Did you start out in Berlin? Was that where you first got together?

CG: I don't know whether I had been...no, I hadn't. I had been to Europe with my parents for a visit, but I hadn't been there. I think that Hans went back to his professor...

VM: Who was were?

CG: ...in Berlin.

VM: I see; Hans had started in Berlin.

CG: He had started in Berlin

VM: Was he a Berliner himself?

CG: I think he might have been born there, I think he was. Then, of course, very quickly there were terrible situations. He never said much about that. Anyway, by the time I came over, that was over. That was Professor Weygand.

VM: Oh, he was in Weygand's lab.?

CG: Yes, in Berlin.

VM: So he went back there from California and so when you came over to join him and get married, you were also in Berlin?

CG : Yes. I was in Berlin.

VM: Did you work in the same lab. as him, then?

CG: Yes.

VM: I see. And eventually you left Berlin and came here —directly?

CG: Yes.

VM: Have you been here ever since?

CG: Yes.

VM: So you've been here for a pretty long time now. Did you work here as a scientist?

CG: In Germany I worked for a while before my children were born; I was mainly in Berlin because I was already fairly well along (*pregnant*) when I came here (*to*

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Freiburg) with the child I was carrying. So I never started in in Freiburg at all. I just finished up what I could do in Berlin and then I wanted to take a break but it turned out that I didn't go back.

VM: You never practised science again?

CG: I didn't practise again. Hans was very successful and here he became a major professor which he liked; I mean, he liked the university atmosphere too.

VM: He was a professor of plant physiology?

CG: Professor of plant physiology. I think that his background in organic chemistry I'm sure helped him. He wasn't strictly...he had not, I think, thought he would end up something more in that direction, but that is what they wanted here in botany and the botany was behind times. They said "no. no. no; what we want now is this and that" and it wasn't difficult for him to change over. His background was so broad he could apply that to almost any direction in this case. So he was very happy and had first class people working with him, also as full professors...one was...all related subjects. They all got along very well. They were all about the same age. They got together; they agreed, they didn't squabble; you know, try to take things away from him. It was a very, very nice time; it hasn't always been that way all the way but with this group it was.

VM: When he came back from America, did he feel, as far as you remember, did he feel that the German atmosphere in the universities was very different from what he had experienced in America?

CG: He never mentioned that, really . He never really talked about that.

VM: Well, what did you feel? When you first came here as a resident, not just as a short-term visitor, and began to work in the German environment did you find it very different from the American scene?

CG: Yes, to quite a degree. For one thing, it was still sort of post-war situation and they had to make do with things that we would not have had to in the United States. But Weygand was able to get a lot of what he needed. I was used in Berkeley to talking with the people just between times or at breaks, something. In Berlin people didn't talk to each other that much. I remember Hans coming out of the door with somebody, somebody...they had been working on something...they had an argument with somebody else and they were talking about it but it wasn't...apparently it was good work being done; I was not in that field when they were doing. I think that Hans felt that this was the way things always were here. I was a little surprised. First of all, there was this one major professor that had so much and he got all these things that he could do the work with. Of course, he was in a better situation. Hans enjoyed being in Berlin and I can't say I didn't. They found a place for me in the laboratory.

VM: When I first went to America, to Calvin's lab., I found the atmosphere startlingly different from what I had been used to because England was post-war: it was dull and

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it was formalised much more than the Americans. There was this sudden, this free and easy free-for-all, everybody talked to everybody else and there was no hierarchy or rank. I wondered whether you, being an American and coming to into a European, particularly Germany which is probably more rigid than England, whether you'd really noticed a great change.

CG: I definitely did. But the fact that I was engaged to Hans — I might already have been married — that was so important. I could always go to him. He was always in good humour, if I had problems and then there was another professor who was sort of a little funny and we made fun of him because he was not taken too seriously, but he would come in with great ideas or something and I thought that was great. You know, we would talk about it and he was so overly optimistic, he was so optimistic that people just smiled about it. But he didn't care; he said "OK, I was right, you were right", or something. There were a couple like that. And then there were a couple of other girls, I remember, but nothing compared to Calvin, nothing.

VM: Did Hans ever send any of his students to Calvin, as postdocs. or as graduate students or anything of that sort, that you know about?

CG: At the time he was still doing what they call his *habilitation* so he was not in a position to send anybody. His professor, that he was still with, would have to have done that.

VM: But later on, when he was here, when he was in Freiburg?

CG: I don't think he ever had anybody that was interested.

VM: The only person I can remember, during the period I was there and that was, after all, several years, was a man called Hans Ullrich. Do you know him?

CG: Yes. Hans Ullrich.

VM: I don't know whether he originated in your Hans' lab., I don't know where he came from. I think he's here now.

CG: He's here. Ullrich, of course. Hans Ullrich. But I haven't heard anything about him. You think he is in Freiburg?

VM: He was from Freiburg and he came to California in the early '60s, I would say, and spent a year and went back. I have to say I haven't had...I've no contact with him since and he is a bit "late" for my period because I have to stop some time. He's the only connection I know with Freiburg and I wondered whether Hans Grisebach had had any prior association with him; whether he had been one of Hans' students or postdocs. or what. But you don't know of any connection?

CG: I don't remember. Now that you say the name, I remember Ullrich. It could be; I would have to ask somebody here in the Botanical Institute.

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VM: I don't want to — I mean, I'm perfectly happy to go on, if you remember any more. Are there incidents or stories or "funnies" or whatever that you can remember that we haven't talked about that might be interesting?

CG: I should have thought about that more intensively before. I was always surprised how congenial everything was and I remember in the lab. there was very little conflict. Everybody would come for coffee at a certain time but then when they'd had their coffee they went back to their labs. and... You always enjoyed going to the laboratory. It was something you wanted to go to, not something you had to.

VM: You remember that there was another section of Calvin's group in the Donner Lab.?

CG: Yes, there was, but I had very little contact with anyone there.

VM: That's what I was about to ask you whether you had.

CG: No. Well, wait a minute: now there was this very tall man, what was his name, now that you say Donner Laboratory?

VM: Dick Lemmon.

CG: Dick Lemmon. Right. Dick Lemmon would quite often...he'd always be invited to the parties we had.

VM: He's a keen skier as well. His wife's called Marguerite. And Bert Tolbert: do you remember him?

CG: Of course, everybody knew about Bert Tolbert. Did he ever get married?

VM: Oh yes. He married a woman called Anne Zweifler who was in the lab. as well. But I'm not sure when that was, whether it was after he left Berkeley or before. I don't know. It's probably in the record somewhere.

CG: Yes, yes, yes, yes. He would go on ski trips with us and things like that I remember.

VM: You certainly have a warm feeling about that part of your life.

CG: Very much, very much.

VM: I think really it remains only to thank you very much for putting up with me intruding on your life, not meeting you at the railway station (*because of construction work*).

CG: Well, that wasn't your fault.

VM: I'm afraid it's one of those things.

CG: I was unprepared for that, too.

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VM: OK. We'll stop at it now.