# Ann Kiessling Oral History Interview, June 13, 2014

**Title**
“Reflections on Oregon Roots”

**Date**
June 13, 2014

**Location**
Valley Library, Oregon State University.

**Summary**
In the interview, Kiessling speaks of her connections with the state of Oregon and OSU. In so doing, she reflects on the academic path that led to her arrival at OSU as a doctoral candidate in 1967, a path that included her earning a degree in nursing as a tool for funding further schooling. She discusses her association with her major professor at OSU, Dr. George Beaudreau, and the work that she conducted in his laboratory, investigating the relationship between viruses and cancer. She shares her memories of her academic progression at Oregon State as well as campus and community life in the late 1960s and early 1970s. She likewise notes the impact that OSU made on the next stages of her career.

The remainder of the interview is chiefly devoted to Kiessling's recollections of her broader ties to the state, including her upbringing in Klamath Falls and the eight years that she spent on faculty at Oregon Health Sciences University.

This interview was conducted in connection with Kiessling's June 2014 visit to Corvallis, during which time she delivered the Commencement Address at OSU's graduation exercises.

**Interviewee**
Ann Kiessling

**Interviewer**
Chris Petersen

**Website**
http://scarc.library.oregonstate.edu/oh150/kiessling/

## Transcript

**Chris Petersen:** Okay, if you could please introduce yourself with your name and today's date, and our location?

**Anne Kiessling:** I'm Ann Kiessling, and this is June 13th, 2014, and we are somewhere in the basement of the OSU library.

**CP:** Terrific. Well, we're going to be talking mostly about your time at OSU, and if we have time we'll talk a little bit about your upbringing in Oregon. The first thing I want to ask you about is, you started your education in Virginia, in nursing, and made the decision at some point to switch tracks into research science, it seems. Tell me how that played out.

**AK:** The nursing degree was always a prelude to a science education. It was the way I planned to work my way through graduate school.

**CP:** Oh, okay. So, the intention—?

**AK:** The only decision was whether to go to medical school or to go into a Ph.D. program. So if you work as a nurse for a while, you pretty quickly decide that you don't want to go to medical school.

**CP:** [Laughs] Did the plan play out as you thought? Did you do some work in nursing?

**AK:** Mm-hm.

**CP:** And this was in Central Washington?

**AK:** Mm-hm. You could support yourself. I could support myself by two hospital shifts a week.

**CP:** Interesting. I don't presume that continued on in Corvallis, then?

**AK:** No. Did I do any nursing in Corvallis? I don't think so. I was fortunate enough; I think in my second year of graduate school, I got a Public Health Service fellowship, a pre-doctoral fellowship, which supported me.

**CP:** So, what was your first interest in science growing up? How did you decide that this was going to be a plan of yours?

**AK:** I don't remember it not being the plan. [Laughs] I guess it was always the plan.

**CP:** Okay. [Laughs]

**AK:** It doesn't seem to me like it was ever a decision. It wasn't if I was going to be a scientist, it was: how was that going to happen, and what type of science was I going to do? I was very interested in organic chemistry for a while.

**CP:** As a youngster?

**AK:** No, after I started school. It was after I took my chemistry degree. I knew I was going to go into some kind of chemical science; I just didn't know what.

**CP:** Was there a mentor of some sort, or somebody who got you interested at an early age in science? What sparked that initial interest? Do you have a memory of that?

**AK:** I don't have any idea.

**CP:** Really?

**AK:** No. There were no scientists in my family.

**CP:** Hm.

**AK:** No. I actually think it was just going to the library.

**CP:** Oh, yeah? Well, we'll trace back to that time here in a little bit. But I want to ask you about the decision to go to OSU and pursue the doctoral studies. You were in Virginia, as we mentioned. You got your nursing degree there. And you went to Central Washington and you got a bachelor's and a master's in chemistry there.

**AK:** Mm-hm.

**CP:** And then you moved on from there to Oregon State. Why OSU?

**AK:** At the time, I decided I wanted to stay on the West Coast, because my family kind of needed me around at that time. And I wanted to take a degree in chemistry, not biochemistry. The graduate school at the University of Washington had a Department of Biochemistry. Other schools that I looked at had departments of biochemistry, and I wanted a chemistry degree. I don't know why. And OSU had not split its department off when I applied, but at the time I was accepted and matriculated, they'd already formed a Biochemistry/Biophysics Department. The person I knew who was here, who was really a fairly well-known scientist at that time, was Ken van Holde, and I think he was a major reason in me being interested in coming.

**CP:** Interesting. So did you work with him when you were here?

**AK:** No. He was on my committee, but then I discovered there was a more interesting biology problem in Dr. Beaudreau's lab. I was very interested in cancer, and he had a really interesting model system of studying leukemia in chickens.

**CP:** Huh. I forget—his first name was?

**AK:** George.

**CP:** George Beaudreau?

**AK:** Mm-hm.

**CP:** What were your initial impressions of OSU and of Corvallis when you arrived?

**AK:** I'd grown up in the state; I knew what Corvallis and the valley was like.

**CP:** Huh.

**AK:** There was no—I mean, I was happy to be here; it was fine. I remember thinking the campus was larger than I thought it was going to be.

**CP:** How was the transition for you, coming from Central Washington to OSU?

**AK:** It was fine.

**CP:** Yeah.

**AK:** Yeah. It was like coming home.

**CP:** How would you characterize the department when you were here, Biochemistry and Biophysics?

**AK:** It was, I mean, I always thought it was a really good department. [0:05:01] We had a very interesting system of preliminary exams. I didn't think to ask anybody about this today, how are they still doing it. But they had adopted—what did they tell me, it was from Duke? They had adopted a system of preliminary exams in which, twice a term, you took a one-question, one-hour exam, and you had to pass five before you failed six.

**CP:** [Laughs]

**AK:** So every quarter, you re-learned the Krebs Cycle, because you were pretty sure somebody was going to ask you the Krebs Cycle. And it was really, it was a very vigorous—you could have one or two times where you looked at the

question and you didn't know the answer, but it could be, it was a one-question, one-hour on anything in biochemistry/ biophysics.

**CP:** Huh. [Laughs]

**AK:** It was brutal! [Laughs]

**CP:** Were there many women in the department, either as faculty or students, at the time?

**AK:** No. As faculty? There were some other women in the department. I mean, as a chemistry major, I certainly faced a reasonable amount of: why are you here? That's true. I just generally ignored it. Dr. Beaudreau, when I went to talk with him about joining his laboratory, he was very thoughtful about that for a minute. I was just thinking about this just the other day. He was very thoughtful about it, and he had a way of pursing up his mouth. He said, "I haven't had very good experience with women in my laboratory." And I remember, I was sitting across his very messy desk, and I remember telling him something like, "I can't—anything to do with your past. I'm only here to help with the future." And I think he thought about it, and decided, okay, well. But my grades were also pretty good.

**CP:** Yeah. How did your research progress over the course of your doctoral studies?

**AK:** Fine. It turned out to be a very exciting time in biology, because this very unusual enzyme was discovered in the viruses that we were studying. So, I ended up in a field that was brand new, and very exciting, and there were very few of us in the field. I could go anywhere I wanted for a post-doc. I was actually recruited for post-doc positions.

**CP:** Uh-huh. Tell us a little bit more about your study.

**AK:** So, at this time there was—Dr. Beaudreau was studying a family of viruses that caused, in his case, leukemia in chickens. And the idea was how did these viruses replicate? And we had just discovered how polio virus replicated, and the notion, the prevailing notion, was that this would be similar. These were RNA tumor viruses. But there was a scientist in Wisconsin who had done a very interesting experiment that indicated that these viruses had a DNA intermediate, right? For that to be true, that meant there had to be a reverse flow of genetic information, from RNA back to DNA.

And the "central dogma" at that time was that all information flows from DNA to RNA. So if this hypothesis were correct, this is a whole new paradigm in biology. And it turned out that the hypothesis was correct, and so we did some of the first —during the course of my research, I did some of the very first experiments to prove that there was a reverse enzyme in this virus family.

**CP:** Did you develop new methods to conduct this experimentation? I guess I'm interested in knowing more about the process that you used in developing these experiments.

**AK:** The methods that we used were standard, in terms of, you used a radioactive precursor, then you measured radioactive DNA incorporation, and that was all pretty standard. The concept that you would have a reverse flow of genetic information was what was new. And the idea was that this wasn't just a virus trick, that this was something that was a fundamental biological phenomenon that we didn't understand. So as a post-doc, then, I actually did a series of experiments to prove that this was true in all cells. That was novel, and very controversial. [0:10:01] But it was a very interesting time in biology. Now we know this is true; now we know that there's a lot of different uses for it, but at that time it was really unusual.

**CP:** How about the technologies that you used? This was before computers in laboratory, or the computers that we think of now.

**AK:** Listen, I was in—oh, yeah, we didn't have any computers. But I was enrolled—I took a computer programming class. There was a brand new computer programming class on campus, so this was probably 1969, maybe. And we were encouraged to take this new computer programming class. It was a time when you wrote your program out by hand, and then you punched IBM cards, and carried them across campus, hoping that you didn't drop them, so that you could see if your program ran in the computer.

**CP:** [Laughs]

**AK:** Not knowing exactly what we were going to do with this technology, but.

**CP:** What other technologies were important to science at that point for you?

**AK:** We had to make our own radioactive reagents. So we had to know a lot about isotopes, and radioactive management and disposal, and half-lifes, and all of that. It was a big part of what we had to do. We wore lead aprons.

**CP:** Huh. How was the laboratory organized, in the sense that Beaudreau was obviously the head of it, but where did you fit in within the organizational structure of the lab?

**AK:** The students were just sort of, yeah, there were a couple of technical people, and they did his personal experiments. And then there were always two or three students, and there was always more than one project going on. One of my colleagues was working on the polyhedrosis virus, which they were using to fight a caterpillar that was devastating ponderosa pines, something like that. So there was always more than one project and more than one student.

**CP:** It's interesting how there's this natural resources, agricultural, sort of connection to a lot of this work.

**AK:** Oh, yeah. It was the Department of Agricultural Chemistry. I mean, the degree was in biochemistry/biophysics, but Dr. Beaudreau's primary faculty appointment was in Ag Chem.

**CP:** What was it like working for him? It sounded like you got off to sort of initially, a slightly rocky start.

**AK:** He was great. He was great. He wasn't a micro-manager. He was kind of a big-picture person. And you met with him—he decided that he was running a relatively small lab in a western university, and to compete on a national level, we had to work six days a week. So our lab meetings were Saturday mornings. So you didn't do a lot of partying on Friday night, because you had to get your lab report ready.

**CP:** Did you have a connection with any other faculty? You mentioned Ken van Holde. You knew him at least tangentially.

**AK:** There was a faculty person who shared the lab with us who was a plant person. What was his name? And one of my colleagues that I kept track of actually was in that lab. He was working on PC links, but our assays, and our equipment that we needed and everything, would cross paths. And he went to the University of Washington. What was his mentor's name? No. I mean, you knew everybody, and if you had a problem, you would go talk to everybody. It was a fairly collegial place.

**CP:** Yeah. Relatively small, I assume.

**AK:** And everybody had to get together for these one-hour, one-question nightmares [laughs], twice a term.

**CP:** [Laughs] That was a bonding experience.

**AK:** We also had to take—we had to pass language proficiencies. The department decided that if you weren't going to take a language, and I think computer science might have been considered a language, but if you didn't take a language, then you were getting a doctorate of science. So to make it a doctor of philosophy, you had—and so we had to pass two proficiency tests in two languages. I think I picked German and French. It wasn't very rigorous, you just had to be able to translate a paper written in German, but you could use a dictionary.

**CP:** [Laughs]

**AK:** It was sort of like the last vestige of philosophy.

**CP:** Did you teach at all?

**AK:** Did we? We taught some labs; we TA'd in some labs, but I didn't have to—I think I only had to do that one term, because I got this predoctoral fellowship from NIH. [0:15:00]

**CP:** Okay, so that funded you for the length of your time?

**AK:** That funded my time, and it funded some supplies.

**CP:** How did that come about?

**AK:** I applied for it. I think it was a requirement. I think Dr. B had all of the graduate students apply for it, partly as practice to write a grant application, and partly because it would really help lab funding. It was pretty common then. I think it paid tuition, too.

**CP:** What building did you work in?

**AK:** Weniger Hall.

**CP:** Ah.

**AK:** Where walking up the stairs was faster than the elevators.

**CP:** [Laughs] I think it still is. Did you spend much time in the library?

**AK:** No.

**CP:** No?

**AK:** No. We had a library. We had a department library. We had to go to the library, but it wasn't this building. I mean, you had to go to the library once in a while, but we had a fairly comprehensive department library for what we needed. And you took all of the journals that you needed; you subscribed to them.

**CP:** So did you spend most of your time in Weniger Hall?

**AK:** Yes.

**CP:** Did you spend much time—?

**AK:** There were classes in other buildings, yeah.

**CP:** Did you spend much time in the Memorial Union, or any place like that?

**AK:** Yes. You went over there. You'd try to go over there for lunch or something, just to get out of the building.

**CP:** Uh-huh. Have you been in it since you've been back?

**AK:** No.

**CP:** I'd be interested to know how it's changed.

**AK:** Well, it was pretty old then, so I'm sure it's changed a lot.

**CP:** Yeah, yeah, I'm sure it has. You mentioned you were working six days a week, but I am interested a little bit, to the extent you had one, about your social life at OSU.

**AK:** Did we have a social life? We had—were there graduate student parties? It seems to me like there were parties, and we knew about—we met students and we knew students. I got married before I finished, so I was here maybe three years before I got married. So there were some kind of student socials. It was more common, I think maybe than now, that your department had parties. So for instance, if you went to a meeting—we used to always go to the FASA [?] meeting

in New Jersey. It was very common. Then your department would host a party at that meeting. And then everybody in the department would show up and compare notes, and drink, and whatever. But social events, department-based social events, were pretty common. You'd end up at the person's house.

**CP:** You had met your husband before you came to OSU?

**AK:** Yes.

**CP:** And he came with you?

**AK:** No. He was in the Navy. We met in Virginia.

**CP:** Okay. But you got married during your OSU time?

**AK:** Right.

**CP:** And then he went back to the Navy, I assume?

**AK:** No, he was a resident; he was actually a resident in Seattle at the time.

**CP:** Okay. That must have been difficult, I assume?

**AK:** It was just a commute. It's not easy to live with somebody finishing their thesis, anyways.

**CP:** [Laughs] Did you have any hangouts? It sounds like you went to the parties at people's houses, but was there anywhere in town?

**AK:** Any place in town? No, not that I can, not that I remember. There might have been. I'm actually trying to remember where I lived.

**CP:** [Laughs]

**AK:** [Laughs]

**CP:** Off campus, I assume?

**AK:** Yeah. I lived off campus. Right. There wasn't any real graduate student housing on campus at that time, that I remember, that I knew anything about.

**CP:** Yeah. I think there still isn't. What was your experience of Corvallis? What did you think of the town, living here?

**AK:** It was fine. I didn't have any particular pros or cons about Corvallis. I guess it's because I knew Corvallis before I came. You know, I knew it was one of the small towns in the valley that was mostly a college school, college campus.

**CP:** Uh-huh. So you had been here before, I assume, growing up?

**AK:** Mm-hm.

**CP:** And knew a little bit about it?

**AK:** Mm-hm. I had relatives in Portland, so going back and forth from Klamath Falls to Portland was an annual event.

**CP:** Well, you were here during a turbulent time in American history, during the late '60s and early '70s. I wonder if you have any memories of anything going on around campus, or in town, related to anti-war activism, or the tumultuous.

**AK:** There was a topic, it was especially a topic of all of the male students, because at that time they were—you know, they all had draft numbers, and so whether or not you were going to get to finish what you were doing. [0:20:03] It didn't

affect the female students. We didn't have draft numbers. But yeah, it was a tumultuous time. It was kind of like the thing that was on top of almost everything that was going on.

**CP:** Uh-huh.

**AK:** That's true.

**CP:** Well, I'm wondering about the impact that OSU made on your career. How did it prepare you for what came next?

**AK:** Well, because what I had done for my thesis, I could go anywhere. I mean, I was recruited to be a post-doc because I knew about this brand new enzyme, and everybody was trying to understand what this whole process was, and was it important, and so. My first post-doc I actually organized before I finished my thesis. I mean, I was still writing my thesis when I started it. And it was the group that formed the Fred Hutchinson Cancer Center in Seattle. And then I was recruited to Memorial Sloan Kettering in New York for the same reason. Everybody wanted to understand this new enzyme. And I published a couple of papers out of my thesis. And then I was recruited to UCSD, same reason.

**CP:** So the line of work began with Dr. Beaudreau. Is that correct? How did he have the idea, do you know?

**AK:** Well, no, he was studying this family of viruses, trying to understand it. And that's what he was; he was a virologist. And there had been a theory hanging around that this was an unusual virus, and it wasn't like polio virus. It wasn't like other viruses. It had to have this reverse step in it. And so he just decided to test that theory. He didn't originate the theory, but there was that theory, and then there was the other theory, and he decided to test both theories. That's what it amounted to.

**CP:** Huh.

**AK:** I remember a phone call from him in Prague. He called me from Prague; he was on exchange, and he said, "The blankety-blank virus has got a reverse enzyme in it. Do that assay." And so, of course, what I had to do was first make the radioactive reagents to do that. So it took a few days, but it was pretty easy to detect by methods that we understood how to do. It was pretty easy to detect.

**CP:** Was his reputation already established before this line of research came about? Or did that change things for him, do you know?

**AK:** I think that changed things for him, but he had developed a reasonable reputation, and I think he was funded—not hugely funded, but I think he was consistently funded. Because the areas he was working on had not only animal importance—I mean, this was actually a disease of chickens that's an agriculturally important disease, but it also had human applications, too. So.

**CP:** And afterward—?

**AK:** I don't know exactly how well-funded he was after that. I only came back to visit, I think, once or twice.

**CP:** Uh-huh.

**AK:** But the next ten years after I started my post-doctorate, I was pretty much pregnant for the next decade.

**CP:** [Laughs] Well, you've returned to campus to speak at the campus. I wonder what your thoughts are, being back in Corvallis, seeing the campus. It's changed quite a lot. And it's changing.

**AK:** Yeah! No, I think it's exciting. I'm absolutely delighted to be here. I'm trying to figure out how I was chosen. I keep asking everybody, how was I chosen to be this year's commencement speaker? Because it seems like it's such a different—something that you wouldn't ask a scientist to do. So nobody's yet told me how I got chosen to do this.

**CP:** [Laughs] Well, let's circle back to the beginning. You were born in Baker City.

**AK:** It wasn't called Baker City then. It was just called Baker then.

**CP:** It was just called Baker, yeah. And did you grow up in Baker?

**AK:** No.

**CP:** Okay.

**AK:** I left there and went to, moved to—my family moved to Klamath Falls when I was about six, I think? Six or seven. So I grew up in Klamath Falls.

**CP:** What were your parents' backgrounds?

**AK:** Neither of my parents graduated from college. My father was a career military person. But I lived with my stepfather, and my stepfather had a small trucking company. So they were not scientists, nor did they understand why I wanted to be one.

**CP:** It's really interesting to me that this seemed ingrained in you from the very beginning. [0:25:01]

**AK:** I think it was going to the library. I could walk to the county library as a child, and I think I just decided this is really interesting.

**CP:** Do you remember what you did at the library, in terms of, were you seeking out specific sorts of things once you got there?

**AK:** Well, I think I decided I was going to read every book in the library. [Laughs] That was the goal. But of course, that didn't ever happen.

**CP:** Yeah.

**AK:** But the biology books were really interesting, and then the chemistry books were interesting.

**CP:** I take it that education was something that meant a lot to you from an early age?

**AK:** Evidently. Evidently. As I watch my granddaughters, I realize, gee, I was spending all of my time in the library at that age. [Laughs]

**CP:** Yeah. Well, what was it like growing up in Klamath Falls?

**AK:** It's a small town. It was totally safe. It was fine. I don't remember any particular—as I started having children of my own, I realized that I had resources and did things growing up that they didn't do. And I don't know how—for instance, my high school education was far better than any of their high school educations. And I don't know quite why. I guess, I don't know if it was—I don't know why. We had three years of Latin. We took three years of biology. I had essentially freshman college biology by the time I graduated high school. There was an airbase in Klamath Falls, and I wonder if perhaps they had extra resources because of the airbase support. Because I know all of the kids that lived on the airbase came to high school. It was only one regional high school. But it was a very good education.

**CP:** Did you have any hobbies growing up, besides going to the library?

**AK:** [Laughs] No, I mean, I was very busy. I had to work, because I had to work to save money to get to college. But I was very busy on campus, very busy with extracurricular activities, and working. I think reading was always the hobby.

**CP:** Why did you decide to go to Virginia, across the country?

**AK:** I started out; I got a scholarship to go to Georgetown, to their nursing school, and that's what took me to Georgetown. And I got a scholarship for the first year, but I did not get a scholarship for the second year, and I couldn't afford to stay there. So the University of Virginia had a really good nursing program, and by that time I was a state resident, so I ended up in that system.

**CP:** That must have been quite a change for you, going from Klamath Falls to Washington, D.C.?

**AK:** It was. It was. It was very interesting; it was. Georgetown, there was a dormitory, and there was a room in the basement of our dormitory for fur coats.

**CP:** [Laughs]

**AK:** A special, conditioned room for fur coats. [Laughs] I don't think I'd ever seen a fur coat before.

**CP:** Another thing I want to ask you about is, you mentioned you spent ten years after OSU being pregnant, basically. During that time, your research and your career continued to move forward. It must have been a difficult balance. I'm always interested in how people balance family and their working.

**AK:** How to balance and keep working, yeah. I sometimes think somebody should ask my kids that, because it seems to me like they did a lot of stuff for themselves. I don't know. They were all healthy, and easy. I don't know; you just do it. While it's going on, you realize that you're always behind. You just never get enough sleep. You're always two or three days behind what you want to get done. And you're balancing: do I do this, or do I go to the school play? You know, it's a constant balancing act, and so I think most of the time it's going on you feel like you're doing—you're not doing it well. But.

**CP:** Yeah.

**AK:** And then one day they're all in school, and then it's all easier. [Laughs]

**CP:** [Laughs] You spent some time at OHSU after OSU, is that correct?

**AK:** Yes. I went to San Diego, and then I went up to—I was at OHSU for— I had one child there—seven years, maybe. Eight years? In the Anatomy Department.

**CP:** That university has also changed a lot in the last few years.

**AK:** I was just back there two or three years ago. [0:30:02] It's amazing what they've done to that campus, right.

**CP:** What was the environment like for you there?

**AK:** It was fine. One of the reasons that I left there—Harvard started recruiting me. And it was interesting that one of the reasons I left was my department chairman decided that transgenic mice was not going to happen; he didn't believe it was real. And so I bumped my head up against that, that feeling, for about a year. And then when Harvard started recruiting me, they said that they would set me up with an entire transgenic mouse facility. So it was partly that there was somebody on the campus that didn't get it, and partly that—because it was hard to move four kids, and we lived in a beautiful place in Raleigh Hills. I took four kids and stuffed them in an apartment.

**CP:** I've interviewed other scientists who have spent time at Harvard, and it sounds like it's a pressure-packed environment.

**AK:** Yeah. I was there for 27 years. You learn to be a real survivor.

**CP:** Uh-huh. Did you miss Oregon?

**AK:** I did. But Boston is a very interesting community. It's an experiment in self-government. So we live in a little town outside of Boston that is literally run by a town meeting. So, once a year there's a town meeting and you vote on everything. Each and every person in the town goes to this meeting, and you vote on the school budget; you vote on what roads you're going to pave. It's a very interesting experience in town government. And it doesn't rain so much. [Laughs] It's a lot more blue skies in Boston.

**CP:** Yeah.

**AK:** It's a very rural area. Have you ever been there?

**CP:** No.

**AK:** Oh, Boston, the city proper, is tiny, and within like 15 or 20 minutes you're in farms. It's not any kind of sprawling metropolis. It's very interesting, and there's just a gazillion little teeny towns, all of whom are self-contained. Many of them are run by the same kind of system of self-government. It's as if the Pilgrims never left. [Laughs]

**CP:** [Laughs] Well, we're running very short on time, and you have a very packed day today. I guess I would just wonder if there's any other events or memories from OSU that strike you that we haven't touched upon, things that you've thought about as you've reflected, coming back?

**AK:** I remember thinking often after I left that the goals of the department were clear, and they were not centered on any one particular personality. So as you go to other institutions, other institutions tend to be polarized, because there is a this person or a that person, and that was odd for me. It seemed like there was no—at OSU, the goal was clear. You were running a good department, to educate people, and to do good science. And there were some people who were good at this, and some who were good at that, and some that were good at other things, but there was no polarizing personality. Probably the best known scientist in the department at that time was Ken van Holde, because he was a real pioneer in the structure and everything of nucleic acids. But he wasn't an overwhelming personality. He was very much a team player, a department—and he went off to Woods Hole every summer. I always thought that was so neat. [Laughs] It was very common then; scientists would go to Woods Hole for the summer.

**CP:** Well, I want to thank you for your time, and wish you luck with the rest of your day, and your presentation tomorrow.

**AK:** Good. [0:34:15]